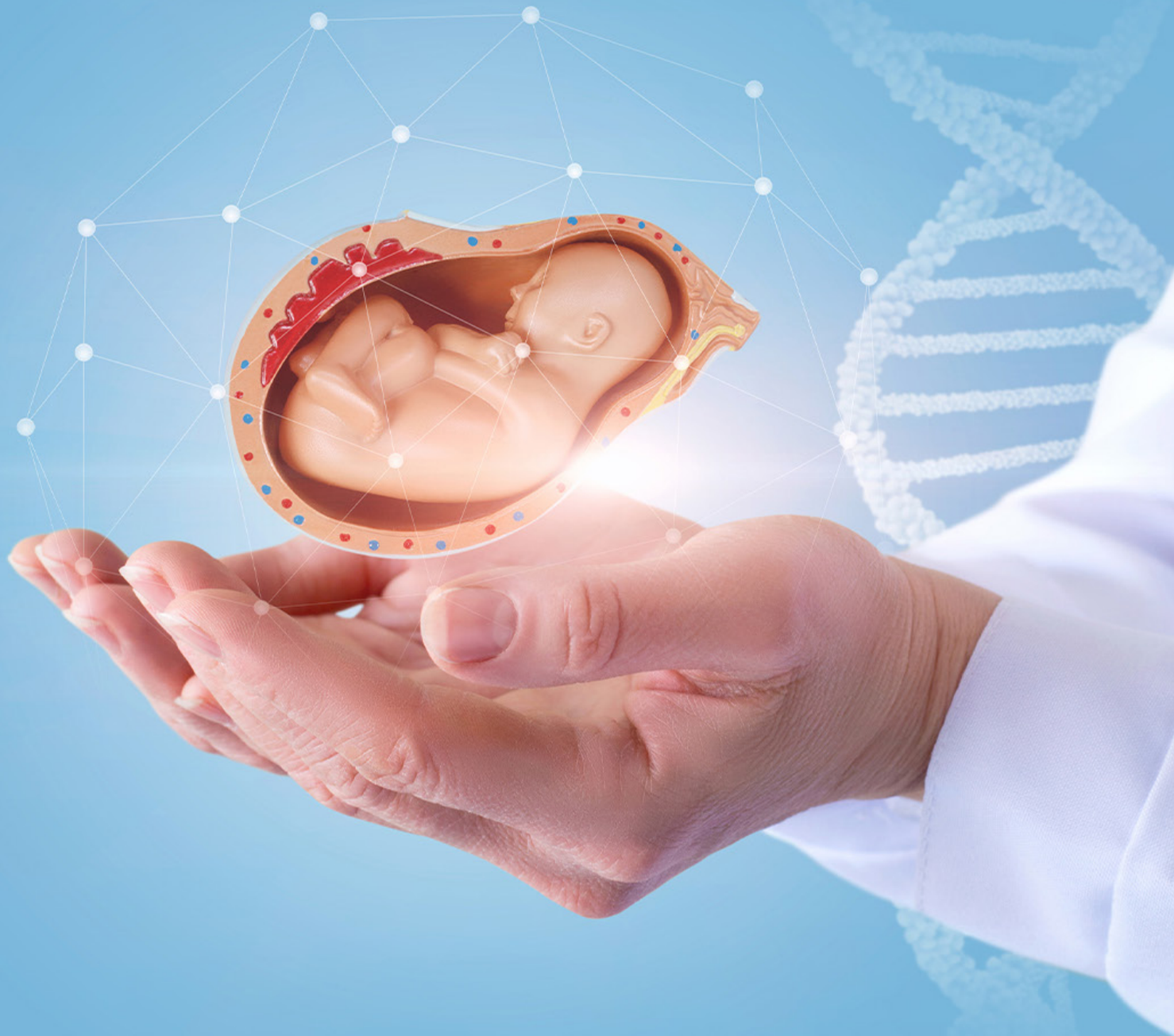
ET Healthworld.com

INNOVATORY GYNAECOLOGISTS OF INDIA



DIGITAL COFFEE TABLE BOOK PREMIUM EDITION

PREFACE

Infertility has become a global epidemic, millions of people are struggling with fertility globally. Several reasons lead to infertility. The majority of them are mostly due to underlying genetic conditions and lifestyle-related. IVF has been a blessing for people who have struggled with infertility. IVF treatment over the decades has improved and so have the clinical outcomes. India's IVF sector is on the cusp of becoming the IVF capital of the world, which will not only bolster medical value tourism but also make it more accessible to the masses.

The second edition of the Digital Coffee Table Book by ETHealthWorld is dedicated to all the stakeholders in the IVF fraternity. If it wasn't for them, millions of people who wanted to embrace parenthood would have not been able to fulfil their dreams. These innovatory gynaecologists assisted by technology have brought smiles to millions through sheer hard work, dedication and empathy. These stalwarts are the flag bearers of the fertility industry in India. They have established India as one of the best IVF centres globally not only in terms of cycles done per year but also in terms of clinical success and cost-effectiveness.

We celebrate and honour these eminent personalities in the second premium edition of our Digital Coffee Table Book, sharing their experiences and the challenges they have faced and how they have helped couples achieve their dreams of parenthood in their years of service to fertility industry.

ET Healthworld.com

INNOVATORY GYNAECOLOGISTS OF INDIA

INDEX

ET Healthworld.com

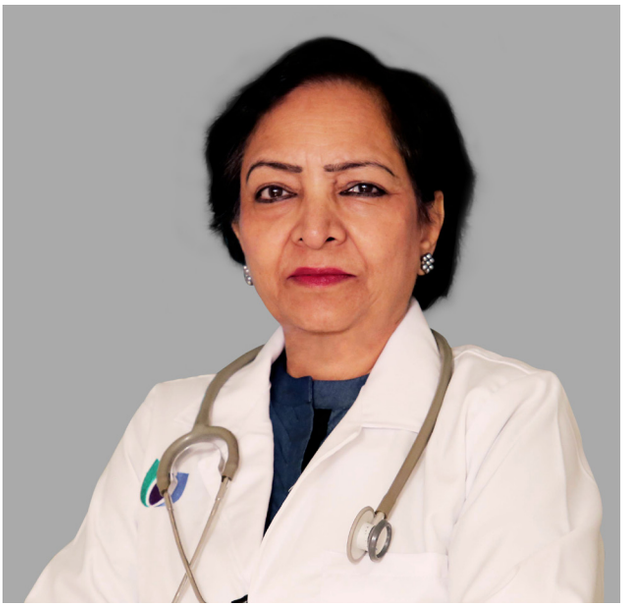
INNOVATORY GYNAECOLOGISTS OF INDIA

INDEX

Digital adoption is crucial in upscaling Indian fertility market

IMPACT OF DIGITISATION

"Adoption of technologies in IVF centres will always have a competitive edge in the market. Moreover, there is less paperwork and spreading the work is even faster. Digital adoption has become extremely important to not only upscale the Indian fertility market but also increase the IVF success rates as well. Further, COVID-19 has metamorphosed into interaction at all levels across the globe."



Dr Kamini A Rao

Medical Director,
Milann – The Fertility Center, Bengaluru

Dr Rao is the Chairman of National Registry of ART Clinics and Banks in India (2018 to date). Her interests are infertility, foetal medicine, reproductive endocrinology, assisted techniques in reproduction.

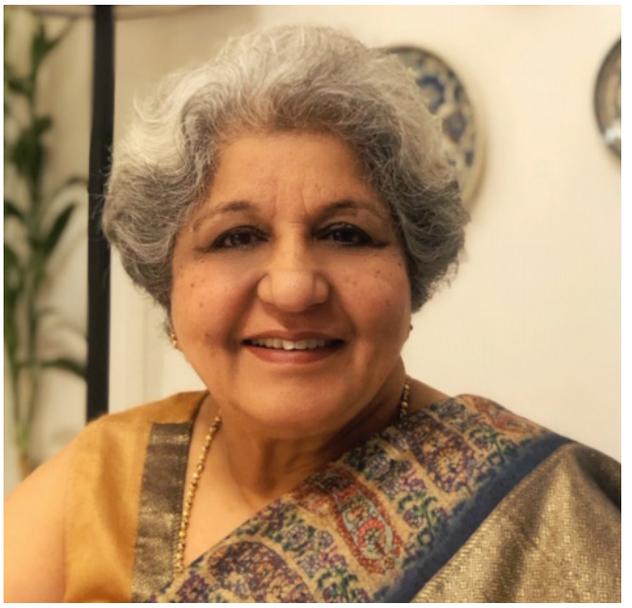
UNIQUE CLINICAL CASE

A lady with no legs was aspiring to be a mother. The couple had lost all hopes since normal conception was not working for a long time. Under proper guidance the woman successfully gave birth to a healthy baby through IVF. The USP of this case was that under normal circumstances since the mother was handicapped and would have been unable to take adequate care of the baby, the entire family was counselled to be an indispensable part in raising the child.

Breast cancer patient conceives with her embryo frozen for seven and half years

IMPACT OF DIGITISATION

"We have always strived to keep abreast with the latest technological advances in centre operations. This is even more imperative since we are part of a chain and should have patient records accessible at any location. We, therefore, maintain patient history, records & prescriptions up to date in our software to allow easy access."



Dr Sonia Malik

Programme Director,
Nova Southend Fertility & IVF,
Delhi NCR

Dr Malik's fertility journey started in 1979 in Basrah University, Iraq, she set up the first dedicated infertility clinic. After an observership in ART at the Alta Bates Medical Centre twice to learn the techniques of IVF & then worked under Dr Indira Hinduja. In 2001 she founded Southend Fertility & IVF.

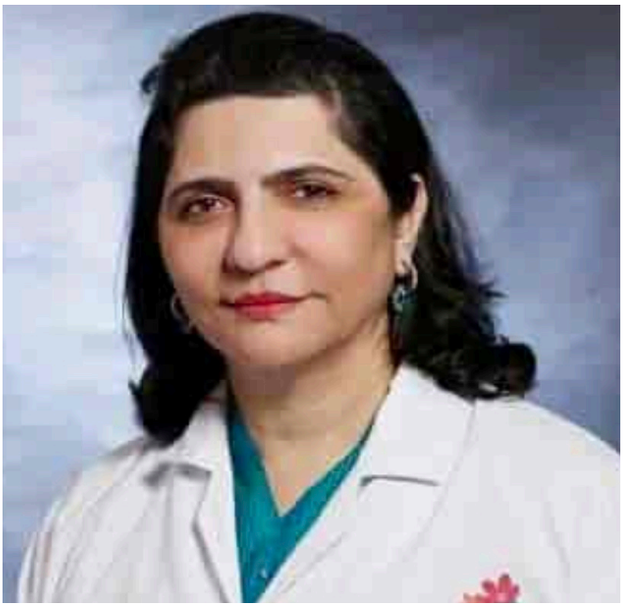
UNIQUE CLINICAL CASE

Breast cancer in one patient was detected while she was undergoing IVF and she felt a lump in her breast. Her IVF was completed, embryos were made and frozen for seven and half years. She returned fully treated to get her embryos implanted. The procedure was completed just before the start of COVID-19, she became pregnant and gave birth to a healthy female baby in June 2021

Treated couple with thalassemia major child, delivered unaffected child

IMPACT OF DIGITISATION

"At our centre we enable our patients to participate holistically for all their medical processes and needs, for better patient care and improve doctor-patient relationships. All the records can be rapidly accessed. Digitalisation of the entire IVF cycle allows us to share photographs, procedures, stimulation protocols at the click of a button. This dynamic approach has helped in training our staff to create a standard of care which goes beyond IVF being an industry and is re-invented as an art."



Dr Firuza Rajesh Parikh

Director, FertilTree- Jaslok International Fertility Centre, Dept of Assisted Reproduction and Genetics, Jaslok Hospital and Research Centre, Mumbai

Dr Parikh is the Editor-in-Chief of Fertility & Sterility Indian Edition, Editorial Board Member Fertility and Sterility, USA and Fertility and Sterility Science, USA. She is currently also serving as the MSc and PhD guide for Mumbai University.

UNIQUE CLINICAL CASE

In July 2018, a couple consulted for their two year old daughter suffering from thalassemia major. Approached us with the desire of having an unaffected child as they wanted to expand their family and also wanted an unaffected child whose umbilical cord stem cells (UBSC) to help in curing their affected daughter through umbilical cord stem cell transplantation in the future. IVF and preimplantation genetic testing (PGT) was explained to them, the couple underwent three ICSI cycles in 2019 and 14 blastocyst stage embryos were obtained. Genetic testing for β-Thalassemia and haplotyping resulted in only one perfect embryo suitable for embryo transfer. The lady conceived in the same cycle and delivered a healthy baby boy in September 2020. UCSC was successfully cryopreserved for future transplantation into the affected baby to cure her thalassemia major permanently.

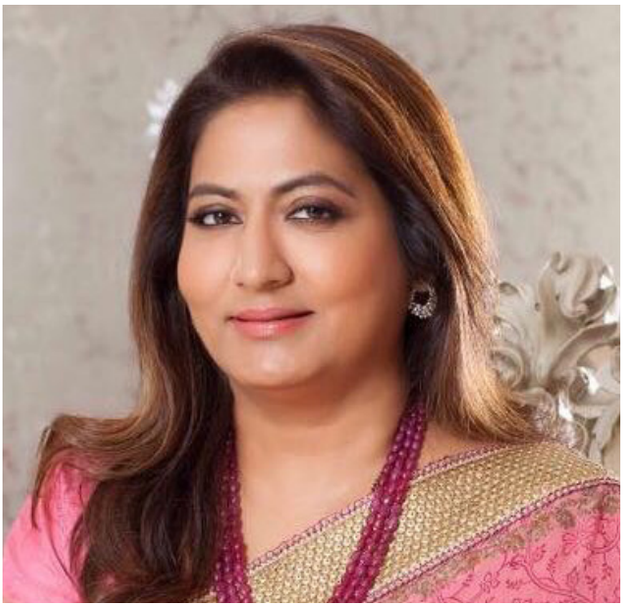
Technology can help increase pregnancy rate

IMPACT OF DIGITISATION

"Digitisation certainly has transformed the narrative for infertility practice in India and the world.Digitisation has the potential to assist infertility patients significantly by increasing pregnancy rates, decrease medical resource utilisation, and most importantly to reduce the financial burden of reproductive technologies. Despite the challenges, it is inevitable that the capabilities of digitisation/ AI in reproductive medicine will continue to expand and improve. The integration of these processes as an invaluable adjunct to infertility specialists, aiding them and their patients by providing high quality health care more efficaciously, accurately, and cost effectively."

UNIQUE CLINICAL CASE

Miss World Diana Hayden approached Dr Palshetkar in 2007 and got her eggs frozen after oocyte retrieval using rapid vitrification, and it remained frozen for until eight years later. They were maintained under strict and sterile conditions to ensure viability. Diana married Collin Dick when she was 40 years old. The couple aimed at conception by natural means but Diana was diagnosed with endometriosis. This, along with her advancing age, led to sub-fertility. She needed IVF to have a baby. Her frozen eggs were used to achieve a pregnancy. Her reserved eggs were injected with Collin's sperms to create an embryo which was subsequently transferred into her. The couple was blessed with a baby on January 9, 2016. Diana underwent another similar cycle at 41 and was blessed with twins.



Dr Nandita Palshetkar

Medical Director
BLOOM IVF, Mumbai

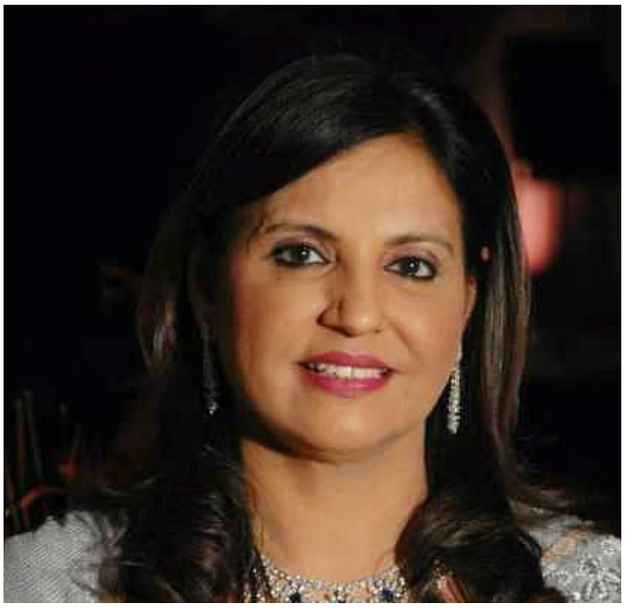
Dr Nandita Palshetkar is an experienced obstetrician and gynaecologist, with an overall experience of 30 years, she has treated more than 10,000 patients. She is currently the President of AMOGS, leading 8000 gynaecologists in the state's fight against COVID-19. The Indian Society of Assisted Reproduction ISAR, of which she is the President Elect, awaits her management expertise in 2022.

Technology is helping understand causes of infertility better

IMPACT OF DIGITISATION

With the emergence of advanced and novel technologies, IVF treatment keeps improving and has given finest results. It helps in understanding the cause of infertility. It also makes the procedure more accurate and safer. A new technique called RI Witness is becoming prevalent these days and is bringing up many success stories. RI Witness works by using radio frequency identification (RFID) to detect and observe all activity going on in the IVF Laboratory. It is designed to curtail errors that may occur in the course of fertility treatment cycles. RI Witness assists and guides embryologists by monitoring sample movement from one dish or tube to another within the laboratory. RI Witness is an electronic witnessing system which is used in the laboratory. RI Witness explicitly records all lab procedures and has the below mentioned benefits:

- Improved accuracy and efficiency
- Improved documentation.
- Reduced distractions and staff workload
- Protocol compliance.



Dr Rita Bakshi

Chairperson & Founder
Risaa IVF, Delhi

Dr Bakshi has extensive experience in all fields of assisted conception, with a special interest in IVF and egg donor surrogacy. She's also the founder of ADIVA Group of Hospitals. She takes your dreams seriously and focuses on the long term and best interests of the child, the surrogate and the intended parents.

UNIQUE CLINICAL CASE

An African woman who was 36 years old and was living through infertility from the last five years. As per speculum examination, it was analysed that there was no cervical opening in the vagina. A vaginal ovum pickup was done, and a good number of Blastocysts were made. She was examined every month to find the opening from where she bled. This was done to find a way to the uterus for embryo transfer. There was no visible opening except a wall. An abdominal embryo transfer was done and it was a success. She conceived and later delivered a baby through cesarean.

Online consultation has helped patients in remote areas seek right treatment

IMPACT OF DIGITISATION

"Digitalisation in fertility space has helped a lot of patients choose the right hospital, doctors and understand the treatment plan. They can easily reach out to health experts and ask their queries digitally. Online consultation has helped patients from remote areas and underserved regions in the country to receive the right treatment."

Dr Nikita Lad Patel

Chief IVF Consultant, Apollo Fertility, Navi Mumbai

She mostly deals with patients seeking gynaecology- oncology treatment for fertility preservation and recurrent implantation failure. Her special areas of interest are high-risk obstetric practice, infertility, hystero-laparoscopic surgery, sonography and IVF management.

UNIQUE CLINICAL CASE

A 19 year old, unmarried, female patient visited the outpatient department (OPD) with a desire of freezing her eggs as she wanted to preserve her fertility owing to the risk of gonadotoxicity caused by the drugs for her autoimmune disorder. In January 2021, she started complaining of abdominal pain. She was advised ultrasonography which revealed a kidney stone. She was prescribed pain killers and asked to follow up. In February, she underwent a CT scan which revealed heterogeneous enlarged kidneys, wedge shaped areas of low density, infection and blood clots in the kidney. She was treated for the same, a week later she developed chest pain with breathlessness and was immediately referred. She underwent pleurocentesis and a kidney biopsy. The biopsy suggested SLE class V membranous nephropathy. The current case report supports the concept that oocyte cryopreservation can be performed successfully in patients with malignant/ premalignant / immunocompromised/ autoimmune conditions helping them preserve their reproductive capacity before undergoing potentially sterilising treatments.

Digital initiatives help connect, engage patients looking for fertility treatment

IMPACT OF DIGITISATION

"Pandemic helped in adopting digital initiatives to connect and engage with patients who were looking for fertility treatment options as well as couples who were undergoing fertility treatment with us. We launched multiple virtual patient engagement & counselling sessions between doctors & patients that help us stay in touch with them throughout their journey."

Dr Asha Baxi

Senior Consultant Obstetrician, Gynaecologist & Infertility Specialist, Motherhood Hospitals, Indore

Dr Baxi is the Founder Chairperson MP IAGE & MP ISAR & Chairperson of FOGSI Infertility committee 2017-20. She is also past President of IOGS.

UNIQUE CLINICAL CASE

A 36 year old married female, belonging to Class III obese group (BMI- 46.3kg/m2) of secondary sub-fertility trying for pregnancy for the last five years. She opted for a self-ART cycle, with 10 days of COS protocol (antagonist), three oocytes were retrieved and ICSI was performed, she conceived successfully. She was also diagnosed with gestational diabetes mellitus and pregnancy induced hypertension, thus initiated medications as per the requirement. With regular growth scans with doppler at around 32 weeks, fetoplacental insufficiency was found. Therefore, after administration of antenatal steroids, the patient successfully delivered an alive female child of 1.3kg by caesarean section. Baby was kept for observation in NICU and then discharged uneventfully.

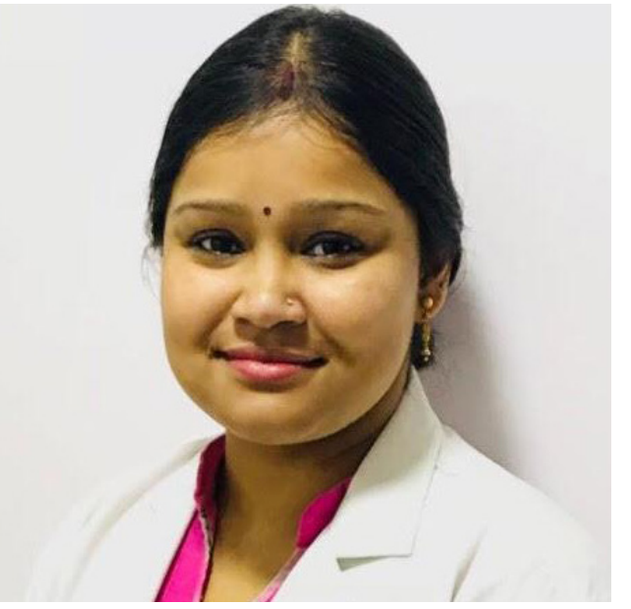
Changing paradigms of IVF: Personalised medicine, ART techniques

IMPACT OF DIGITISATION

"The IVF community has succeeded in enhancing the quality of IVF-treatments and success rates in patients conceiving. However, several clinics face challenges in terms of success rates of IVF procedures. The advent of personalised medicine and ART techniques, specifically for infertility treatment in both women and men (TESA, laser assisted hatching , pre-implantation genetic testing, non invasive PGT, advanced sperm selection techniques, time lapse imaging, oocyte freezing), is the biggest change that is visible in the market and is contributing to its increasing adoption."

UNIQUE CLINICAL CASE

A 39-year-old woman with avascular necrosis of bilateral hip joints followed by hip replacement surgery came for fertility treatment. On evaluation AMH: 1.2, rest all fertility parameters within normal range. Semen analysis within normal range. Counselled regarding complications of SLE during pregnancy and the neonatal period. The patient was adamant and wanted pregnancy with her own eggs and wanted to go ahead with IUI. After her consent and proper evaluation, two cycles of IUI were completed but the patient failed to conceive. AMH was repeated after three months as Dr Halder was suspicious following a follicular scan. Repeat AMH 0.5. The patient was strongly counselled for IVF/ donor IVF and poor outcome if self-eggs are taken.



Dr Arunima Halder

Consultant, Manipal Hospitals, Bengaluru

Dr Halder completed her MBBS from Manipal University and her MS (OBGYN) from Lady Hardinge Medical College, New Delhi, DNB (OBGYN) from National Board of Examinations and FNB (Reproductive Medicine) from National Board of Examinations. Her special interests are diminished ovarian reserve, recurrent implantation failure and polycystic ovarian disease. She has a keen interest in infertility related ultrasonography.

The patient wanted to go ahead with IVF. Letrozole based mild stimulation cycle. Three oocytes were obtained. 2 M2 and 1 M1. 1x8cGA embryo was frozen. Modified Natural cycle FET (day three) done for her. The patient conceived with Bhcg of 1289.

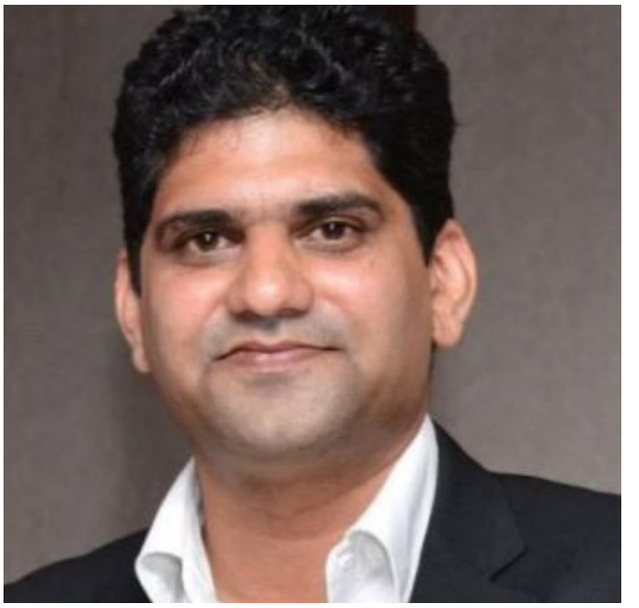
Women with abnormal cervical appearance should be screened for cervical TB

IMPACT OF DIGITISATION

"Being a part of IVF at home where the IVF procedure is conducted at home which saves time and travel and avoids contracting any virus, video consultations where patients consult doctors from the comfort of their homes, and webinars and short videos on digital platforms wherein informative topics related to infertility are discussed, as part of digitisation has helped me in contributing a little in improving access to ART services to consumers whilst creating awareness about ART and the technologies."

UNIQUE CLINICAL CASE

Tuberculosis (TB) of the cervix is a rare disease and accounts to 0.1 – 0.65 per cent of all cases of TB and 5 – 24 per cent of genital tract tuberculosis. An unusual case of a 40 year old lady with irregular vaginal bleeding and foul smelling white discharge for one year. Per speculum examination revealed an unhealthy looking cervix which bled on touch. A clinical diagnosis of carcinoma cervix was done. However, cervix biopsy revealed a granulomatous lesion suggestive of TB. The patient responded to anti-tubercular therapy. In women with abnormal cervical appearance, there should be high index of suspicion of TB cervix, especially from areas where TB is common as it can be easily treated.



Dr Prashant Joshi

Consultant Reproductive Medicine and Clinical Director, Milann Fertility Centre Indiranagar, Bengaluru

Dr Prashant S Joshi with more than 15 years of experience is an expert in the field of infertility evaluation / treatment, in-vitro fertilisation (IVF), intra-uterine insemination (IUI), gynae endoscopic surgeries and maternal care/ checkup.

Advanced technologies are opening more avenues for IVF procedures

IMPACT OF DIGITISATION

"With rapid digital disruption, medical professionals, embryologists, IVF specialists and doctors can produce simple and effective results in the fertility segment. However, the lack of digital support, the presence of errors is highly likely which further impacts the success rate of the IVF process. It is anticipated that over the next decade, technological advancements might open up avenues for the IVF services market."

UNIQUE CLINICAL CASE

A couple (34 years female, 38 years male) was trying to conceive. They had been married for 18 months and were trying for pregnancy since marriage. Female was diagnosed with fibroid uterus and operated for the same. Detailed infertility evaluation showed premature ovarian insufficiency with a very low AMH(0.08ng/ml) and high FSH(67.17mIu/ml) and husband had moderate teratozoospermia. ICSI cycle with donor egg for the couple was planned after counselling. She was found to have premature ovarian insufficiency. Evaluation showed, thin endometrium in her natural menstrual cycle on day 12. Post third HRT cycle with three doses of intra-uterine PRP(Platelet-rich plasma), still endometrium was only 5.5mm. With two months rest to uterus, no medication fourth cycle of HRT was attempted. With HRT and two doses of intra-uterine instillation of G-CSF, ET of 6mm was visible with good triple line pattern and blood flow hence proceeded for the embryo transfer after explaining to the couple probable low implantation rates. Patient had a positive B-hcg report on 14th day of transfer.

Dr Vasundhara Kamineni

Medical Director, Kamineni Fertility Center, Professor & HOD Department of Obstetrics & Gynecology, Kamineni Academy of Medical Sciences and Research Center, Hyderabad

Dr Vasundhara Kamineni's special interests are cervical cancer screening, laparoscopy surgery and management of high risk pregnancy with more than a decade of unparalleled experience. She is an expert in general obstetrics and gynaecology, infertility and laparoscopic surgery. Presently she is pursuing a PhD in Human Genetics.

IVF's future will rely on relationship between humans & AI

IMPACT OF DIGITISATION

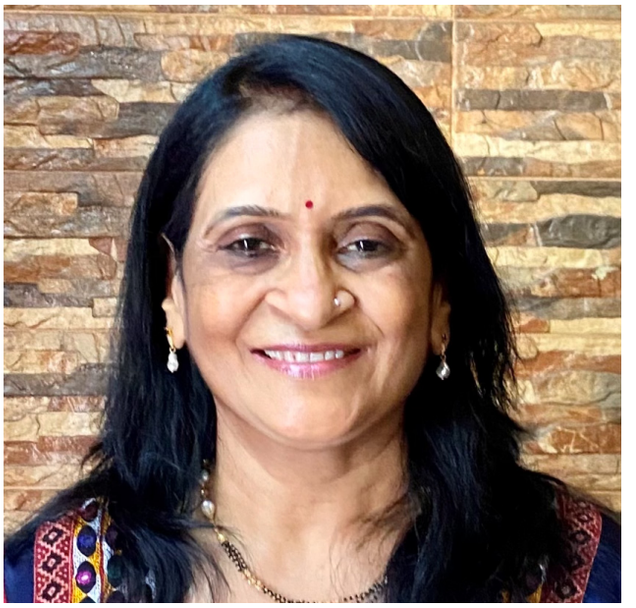
"Digital technologies can provide information and support for those wanting to conceive – the ability to track ovulation, freeze eggs for future use, perform genetic screenings and undergo uterine transplants has opened new doors in ART. Further, the future of fertility treatment will rely on the relationship between humans & advances in artificial intelligence (Robotic procedure in the first-class state of art equipment. Embryology Labs and OTs or predictive AI algorithm for stimulation protocols) in achieving better IVF success rate."

UNIQUE CLINICAL CASE

Patient aged 35 years weighing 95 kg came for infertility treatment. Three IUI cycle with ovulation induction were done, all were unsuccessful. Hence, offered IVF treatment, patient conceived in first IVF cycle. Patient had continued bleeding P/V. Hence repeat USG (TAS) was done at eight week and a live intrauterine foetus was present. In view of continuous bleeding P/V, patient was convinced for P/S examination to rule out local cause like cervical polyp for bleeding P/V.

TVS revealed heterotopic pregnancy, a cervical pregnancy (one intrauterine and second in the cervix). Foetal reduction of cervical pregnancy was to be performed, patient started bleeding profusely on day of diagnosis. Four units of blood transfusion was given, Feotus reduction was not possible. Hence, cervical encirclage stitch was taken to control the bleeding, bleeding stopped immediately.

Foetus in the uterus was live, pregnancy continued. Regular follow up USG and routine ANC. Patient carried up to 36 weeks, delivered 2.6 kg live female baby at 36 weeks through cesarean section.



Dr Jagruti Desai

Medical Director, Udhna Hospital, Surat

Dr Jagruti Desai is an eminent and leading obstetrician and gynaecologist practicing in Surat for more than 36 years. She believes in treating patients more than anything else, to the extent of serving patient free of costs on innumerable occasions.

Telemedicine has been a boon to healthcare

IMPACT OF DIGITISATION

"Digitalisation has really revolutionised and changed the way we practise. Fertility treatments require day to day monitoring patients need to report to doctors on daily basis. All these can be done over video calls and other suitable apps. Digital platforms have reduced the burden on the medical system and handling of patients is smooth, records are automatically organised, reducing wastage of time, energy and human effort. Global fertility practitioners community has come closer and exchange ideas more effectively and more economically."

UNIQUE CLINICAL CASE

A 37 year old lady with history of amenorrhea for over a year. She was labelled as premature menopause when she consulted two different doctors, she wanted further advice for her so called menopause. She had one full term normal delivery and did not conceive after that. She had been diagnosed with hypothyroidism and was on thyroid medication for two years. In view of her PCOS like clinical picture, androgen profile was ordered and was found to be abnormal with high prolactin level, high serum cortisol levels. MRI with pituitary protocol was advised, MRI showed a macroadenoma of pituitary gland. High androgen levels and high cortisol levels were suggesting a rare but possible ACTH secreting pituitary tumour. She was referred to the neurosurgery department, subjected to trans-sphenoidal pituitary tumour excision.

Dr Suvarna Satish Khadilkar

Professor and Head of Department of Obstetrics and Gynaecology, Consultant Endocrinologist and Gynaecologist, Bombay Hospital Institute of Medical Sciences (MUHS Affiliated), Mumbai

Suvarna Satish Khadilkar is the Professor and Head of Department of Obstetrics and Gynaecology, and Consultant Endocrinologist and Gynecologist, Bombay Hospital Institute of Medical Sciences (MUHS Affiliated), Mumbai. She is also the Deputy Secretary General, FOGSI 2021-24 Secretary, MOGS.

The tumour had already grown very close to the optic chiasma, surgery was uneventful, post surgery hormone levels normalised. Histopathology confirmed the diagnosis of ACTH secreting tumour. Repeat MRI showed tumour size reduced significantly and was away from optic nerve.

Couples should screen themselves for thalassemia before trying to conceive

IMPACT OF DIGITISATION

"All patients history, pathology test reports, ART procedure records, prescriptions, consents, appointment history including hospital management is fully digitalised. All SOP's and training modules can be converted in digital formats and shared. Digital tools can be used exclusively for communication for various needs and communications between various centres. Providing guidance to consultants during live procedures including critical procedures in ART labs can enhance outcomes."

UNIQUE CLINICAL CASE

Three couples with a thalassemia major child have been treated, with novel technique of pre-implantation genetic diagnosis (PGT-M). Creating the embryos and giving birth to a child who is disease free and HLA match saviour for the affected sibling. The mutations were identified which were responsible for thalassemia in the couple as well as the affected child.

IVF was done in routine manner, embryos created, embryos were biopsied and genetic material from the embryos was collected. The genetic material was tested for whether it was affected with thalassemia. The embryos that were normal were further tested for HLA matching with the affected child. The embryos which were disease free and HLA match were used to achieve pregnancy in the couple.

Dr Himanshu Bavishi

Founder & Director, Bavishi Fertility Institute, Ahmedabad

Dr Himanshu Bavishi is a senior ART consultant, in practice since 1996 and ART since 1998. He founded Bavishi Fertility Institute in 1998. He is the Founder President of Indian Medical Association-Bavla branch & Founder President of Indian Society For Third Party Assisted Reproduction- INSTAR.

All three couples conceived, two of them have delivered, the children born have already tested to be thalassemia free and HLA match to the affected sibling. When these children grow up they will be capable of donating bone marrow to the sibling, the transplantation will help cure the sibling of the disease permanently.

Technology is reducing the time frame for diagnosis, treatment

IMPACT OF DIGITISATION

"Use of digital technology: video consultation of patients during the pandemic through Shalby app, WhatsApp calls and WhatsApp chats. Digital technology is being used for receiving timely investigative reports of the patients and directing the staff accordingly.

Use of digital devices Endoscopy with HD - Spice Karl Storz System with J&J Harmonic for Fertility Enhancing Surgeries and 3D ultrasonography of pregnancy and gynaec conditions."

UNIQUE CLINICAL CASE

A 22 year old female with eight weeks pregnancy consulted with chief complaints of discomfort, heaviness and pain in the abdomen. Her investigations revealed a 20cm giant ovarian cyst. Over 6cm cysts need surgical intervention. Generally 8-10cm cysts are more common. This made the pregnancy complex and difficult, also risking the foetus. Operating with a live pregnancy is a challenge for the surgeon as it demands utmost control and expertise because of restriction in manipulation/manoeuvring of the uterus. There is a fear of loss of pregnancy (abortion).

The main concerns with pregnant females who develop adnexal masses are pregnancy complications and malignancies; timely management in this case is essential, without jeopardising the health of the foetus. The giant cyst already occupied the space in the uterus there was not enough space for the foetus to grow. This demanded that a surgery was absolutely necessary. The patient was teated with laparoscopic cyst removal surgery without disturbing the pregnancy and led it to normal delivery.

Dr Chirag B Shah

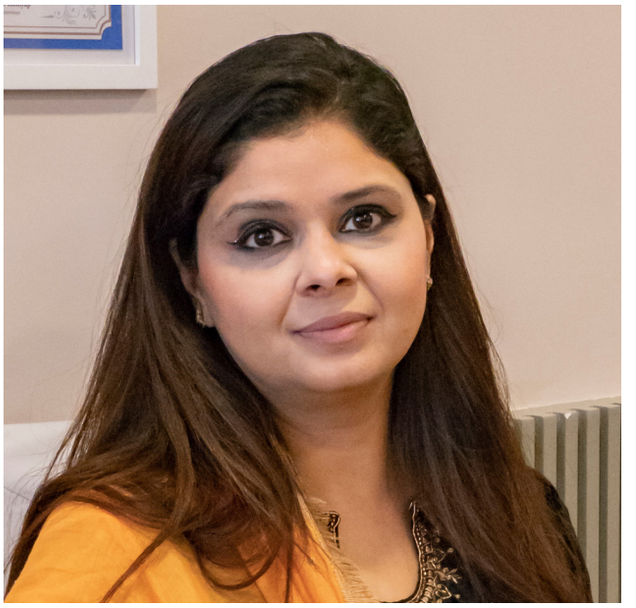
Senior Consultant, Obstetrics and Gynaecology, Shalby Hospital, Ahmedabad

Dr Chirag Shah is a skilled gynaecologist with a wide experience of 19 years, he is an expert in dealing with high risk pregnancy cases and performing complex surgical procedures. He believes in putting his patients at ease.

Technology has eased access to valuable information

IMPACT OF DIGITISATION

"Patients are technologically advanced to calculate benefits and risks before availing any particular service. Seeds of Innocence, Delhi dutifully satiate its patients with clinically backed content through informative tools and blogs on infertility, pre-treatment video consultations with expert doctors, detailed webinars, an improved and user-friendly website, and consistent delivery of patient care through digital media. The last two years has made the digital platforms a source of information which is well accepted by patients due to the ease of access and reach. Apart from the centres, we also reach out to patients from remote areas through digital platforms, enabling interaction with patients in need."



Dr Gauri Agarwal

Founding Director,
Seeds of Innocence, Delhi

Dr Gauri Agarwal is an internationally recognised infertility & IVF specialist who holds over 15 years of experience in gynaecology and infertility. She is the Founding Director at Seeds of Innocence, a reputed chain of IVF Centres and Genestrings, a state of the art Genetic Diagnostic Laboratory.

UNIQUE CLINICAL CASE

A 33 year old couple with a record of three failed IVF attempts and a history of continuing fertility medication for the past seven years came for consultation. The couple was again advised IVF, three Morulas were transferred in view of the three failed cycles, and consequently, the mother conceived triplets successfully. The mother was given a choice of foetal reduction and was advised to wait further. One of the foetuses vanished and the pregnancy continued with dichorionic diamniotic (DCDA) twins. At around 28 weeks of pregnancy, the mother developed late intrauterine growth reduction (IUGR) and was kept under constant supervision. In the meantime ultrasounds, foetal doppler scan and non-stress test (NST) of the twins were conducted as and when required. A steroid cover was given to the mother and the twins presented with decreased movements around week 34. The mother was taken for an emergency lower segment cesarean section (LSCS) and delivered healthy twins. The twins were discharged after two weeks of paediatric supervision and care.

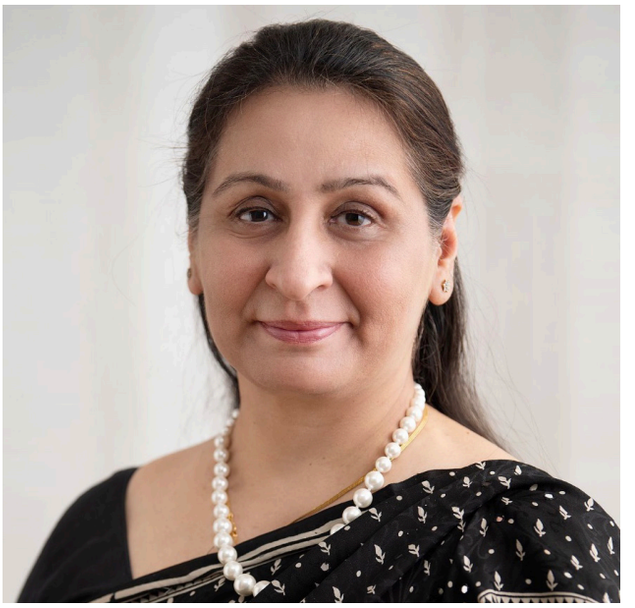
Advanced technologies ushering in new era for IVF

IMPACT OF DIGITISATION

"Digitisation in IVF and fertility is laying a foundation towards a new era. It is important to value technological advancements & innovations. Nowadays, embryology labs are equipped with the best state-of-the-art equipment and technologies that are suitable to patient needs, and that is helping in achieving a better IVF success rate. Equipment's like embryo imaging incubators or embryo-scopes have changed many things. Electronic monitoring is helping with gaining patient confidence. Digitisation is being used at every step in an IVF lab and has revolutionised the fertility outcomes to a large extent."

UNIQUE CLINICAL CASE

A 19 year old girl was referred from a peripheral centre with severe pain right lower abdomen of sudden onset. The pain was associated with vomiting and was not relieved with any analgesic. A surgical reference was done and appendicitis was excluded. Usg lower abdomen showed a right adnexal cyst about 10cm in diameter. MRI of pelvis revealed the same right ovarian cyst. In view of the persistent pain in the abdomen with no response to analgesics, the patient was prepared for an emergency laparoscopy. On visualising with the laparoscope she was found to have a large 10-12cm right t ovarian cyst with a twisted pedicle and blue discolouration, fear of losing the ovary in a young unmarried girl. The pedicle was untwisted two and half times and gradually the cyst became pink with complete vascularisation. Right ovarian cystectomy was performed.



Dr Bandana Sodhi

Senior Consultant (OBST & GYN) & Gyn Laparoscopic surgeon, Fortis la Femme, Greater Kailash 2 & Moolchand hospital, New Delhi

She is an advanced gynaecological minimally invasive surgeon with expertise in laparoscopic and hysteroscopic surgery with more than 20 years of experience. Topics close to heart are infertility and high risk pregnancy apart from endoscopy which she is very passionate about.

Caesarean scar pregnancy is life-threatening, more common than previously thought

IMPACT OF DIGITISATION

"The World Health Organisation (WHO) estimates that 60 to 80 million couples worldwide currently suffer from infertility. Infertility tends to be highest in countries with high fertility rates, an occurrence termed 'barrenness' amid plenty. Therefore, a digitisation of cases and their analysis is necessary to modulate approach towards patient. It will definitely help to monitor work and resources utilised from lab to doctor to patient. It would enhance our experience and relationship with patient."

UNIQUE CLINICAL CASE

The incidence of caesarean scar pregnancy (CSP) ranges from 1/1800-1/2500 of all pregnancies. It has been estimated that 6.1 per cent of women with at least a previous caesarean section and diagnosed as ectopic pregnancy will be CSP. (Rotas, Haberman & Levgur, 2006). The most probable mechanism is invasion of myometrium through a microscopic tract. The tract is believed to develop from trauma due to previous uterine surgeries like caesarean section, dilatation and curettage, myomectomy, etc.

In this case series common symptoms of CSP were vaginal bleeding, spotting and pain in the lower abdomen, all patients had 1-2 C-sections in the past, two patients had undergone D&C in the past and among them one patient had received three doses of methotrexate. The gestational age by USG was between 6-12 weeks. All patients were treated surgically. One patient had laparoscopic guided hysteroscopic removal of scar pregnancy. Two patients had B/L UAE f/b laparotomy and removal of scar pregnancy and two patients underwent total abdominal hysterectomy and among them one had placenta accreta. All patients were kept in follow up and were well after treatment.

Dr Indu Taneja

Director, Fortis Escorts Hospital, Faridabad

Dr Indu Taneja is currently working with Fortis Hospitals Group at Fortis Escorts Hospital and Research Centre, Faridabad, India, since March, 1993. She is the Vice President of FOGS and Executive Council Member of IMA, Faridabad. She is also an active member and office bearer of National Gynae and Obstetrics Societies.

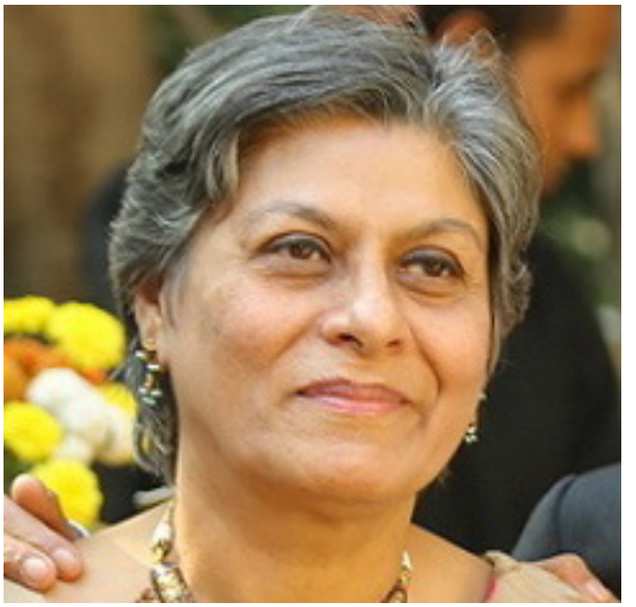
Digitisation has increased accessibility to information

IMPACT OF DIGITISATION

"Digitisation is not just a new flavour of the season, but it is an extremely powerful tool and platform where knowledge from every corner of the world can be accessed by the simple click of a mouse. It just levels the field that has been rather one sided and denying knowledge to the unaffordable little minds that have been parched for knowledge. In infertility, not just the treating clinicians but the couple stand to benefit immensely from the research, studies and are reassured when they read stories similar to theirs."

UNIQUE CLINICAL CASE

Ethiopian unmarried girl in her late 20s was an interesting case of hemoperitoneum and hemothorax. The girl with history of two previous paparotomies and one thoracotomy and one malecots tube drainage of thoracic blood collection. In South Africa during consultation she was told that she had endometriosis with catamenial blood collection in thoracic cavity and peritoneal cavity. She had come to India for yet another opinion whilst she was five months post laparotomy and was on monthly GnRh analogues. She wanted our opinion on line of management. CT of abdomen, chest and CA-125 was done which was normal. Post diagnosis she was informed that she was an extremely unusual case of endometriosis which Dr Chadha had never seen before, requiring so many surgeries. She left within a week. While reading recent journal about SHiP—which is spontaneous hemorrhagic ascites and hemothorax in endometriosis and these are extremely rare presentations and only 60 cases in the world have been reported. In management, if the patient is refractory to medical management, then more definitive therapy may involve hysterectomy and salpingo oophorectomy.



Dr Geeta Chadha

Senior Consultant, Indraprastha Apollo Hospitals & Apollo Cradle Royale,
New Delhi

Dr Geeta Chadha has been working at Indraprastha Apollo Hospitals as a Senior Consultant, Obststrics and Gynaecology since 1996. She has been appointed as 'Academic Advisor' in Department of Obstetrics & Gynaecology at Indraprastha Apollo Hospitals for the years 2021-2023.

42 year old achieves motherhood through surrogacy

IMPACT OF DIGITISATION

"Telemedicine specially in times of corona pandemic , artificial intelligence (AI)-enabled medical devices, electronic health records are few examples of digital transformation which our organisation has incorporated and these are completely reshaping the practice of medicine. It has impacted our decisions, treatment plans and outcomes in a positive manner. Bringing our records into the digital age has led to increased efficiency, better protection and painless retrieval of our records, improving patient satisfaction and a faster service. Digitalisation has also led to better communication in case help of different specialists is required."

UNIQUE CLINICAL CASE

A 42 year old, married female with primary infertility for 15 years with severe menorrhagia came for consultation. On examination she had pallor 3+ and an 18 weeks sized irregularly enlarged firm uterus. A baseline ultrasound examination revealed an irregularly enlarged uterus of 18 weeks size with multiple fibroids, intramural and submucous, ranging from 2-6 cm, with a distorted uterine cavity. Bilateral ovaries had 1-2 antral follicles in each side. Semen analysis of the husband was normal. Patient was counselled to undergo blood transfusion followed by laparoscopic hysterectomy followed by surrogacy. After three months of TLH, she underwent IVF. She underwent two cycles of stimulation with minimal stimulation protocol. Two oocytes were retrieved and two C grade embryos were transferred in a surrogate. Surrogate was prepared and three A grade embryos were transferred. Beta HCG done after 16 days luteal support was 1659 and was positive. The surrogate delivered a healthy 3kg female at 38 weeks gestation.

Dr Vandana Bhatia

Consultant IVF, Nova Southend Fertility & IVF, New Delhi

Dr Vandana Bhatia has been practising infertility and IVF and have been associated with Southend Fertility and IVF since 2007 under the able guidance and leadership of Dr Sonia Malik.

106 fibroids were successfully removed and uterus preserved

IMPACT OF DIGITISATION

"The world is going digital, specially in infertility segment, we are able to do fertility cycles online which helped us a lot during Covid times. Online video consultation is possible from a remote city or a different country. Patient can get investigations done and come only for few days for surgeries. Treatments have become globalised and it is very convenient for the doctor & the patient to manage a particular condition and get best results."

UNIQUE CLINICAL CASE

In Feb 2021, a young unmarried girl came with severe pain and heavy flow during periods. On examination it was found that the size of uterus was so big that it was filling her entire abdomen. She was looking extremely weak, had fainting attacks off and on. Her ultrasound showed multiple fibroids. She needed urgent surgery as her haemoglobin had dropped to 7.2 gm per cent. The patient had a past surgery done by us in 2015 when we removed 48 fibroids of variable sizes. She was advised regular follow up and treatment as this condition is likely to recur in future, but the she didn't turn up for follow-up.

The surgery was high risk, as a repeat surgery carries higher risk. Her haemoglobin was built up from 7.2mg/dl to 12mg/dl by iron injections. She was planned for myomectomy (removal of fibroids) and preservation of uterus. Patient was taken up for surgery which went on for 4.5 hours and 106 fibroids were removed. Uterus was stitched in multiple layers for a good healing. Patient needed ICU care and blood transfusions after this mega surgery. She recovered well and was discharged in good condition.

Dr Dinesh Kansal

HOD and Director, BLK MAX Super-speciality Hospital, Delhi

Dr Dinesh Kansal has been in private practice for the past 33 years and gained vast experience & great skills in advanced & difficult cases of laparoscopic and hysteroscopic gynae surgeries. She has been President Delhi Gynae Endoscopists Society for past three years.

Patient awareness has increased, leading to timely treatment

IMPACT OF DIGITISATION

"Digitisation has increased the reach of the technology to the masses and not limiting to the classes. Patients have become more aware of their disease and to seek help but at times also come with lot of negative information on net. Now a days knowledge on internet is not sufficient and couples like to treat themselves with half knowledge. Half knowledge can create more confusion in person's mind so, before making the diagnosis of the current health condition. Digitisation in fertility segment has helped many clients with tele consultation to their doctors and it has made doctors life more easier as well. Doctors now can provide online prescriptions to the patient which can minimise the risk of medication error and doctors can also maintain a health record of the client. In order to produce high quality data the basic requirement is to keep the lab in good condition. Therefore, we can maintain a dashboard of the key performance indicators which would help us in keeping a track of the quality of results, inventory, environment and processes of the lab."

Dr Jyoti Bali

Director, BabySoon Fertility and IVF Centre, Delhi

Dr Jyoti Bali is the Founder Secretary of Delhi Gynaecologist Forum and the Vice President of Delhi Gynaecologist Forum (Central). She is the Joint Secretary of the National Women Wing, Indian Medical Association. She has been serving as the Secretary of the Indian Society of Assisted Reproduction, Delhi and an Executive Member of NARCHI.

UNIQUE CLINICAL CASE

A 32 year old women married for four years, with case of primary infertility visited the clinic with history of absent uterus (MRKH syndrome). After detailed counselling of the couple, semen analysis of the husband was done which was normal. On ultrasound both the ovaries were visualised, AMH of 3.2 ng/ml. Patient was stimulated for 12 days agonist trigger given and a laparoscopic pickup was planned. Eight blastocyst were formed and frozen two embryos transferred into a surrogate mother which resulted in twin pregnancy. Nine months later delivered a healthy boy and a girl.

Digitisation is critical to creating awareness, reaching the masses

IMPACT OF DIGITISATION

"In today's scenario digitisation plays a very important role. It is very important for creating correct awareness and for reaching the masses. Not just that but it creates great impact and increases the understanding of the patient. Because of digitisation, patients from different cities, states and even countries reach out to you for help."

Dr Anshika Lekhi

Senior Consultant Infertility,
Milann Fertility Center, Gurugram

Dr Anshika Lekhi is a practising gynaecologist and IVF specialist with eight years of experience. Handling difficult cases of infertility is her passion. She likes exploring new therapies of treatment, it gives her immense happiness and satisfaction to see smiles on faces of couples struggling with infertility for years all together.

UNIQUE CLINICAL CASE

A 29 year old couple with primary infertility with azoospermia referred for IVF. They had been to multiple gynaecologists and urologists for the same. Considering their history, examined the male partner. On examination everything seemed normal anatomically except small soft bulge near the epididymis. Ordered baseline test for the female and advised a course of antibiotics and antioxidants for the male and called him back for repeat analysis after 21 days. On repeat analysis analysis patient had near normal semen analysis, the problem he had been classified with from past three years was normal now. The female amh now came very low as 0.7. Treated her with testosterone before IVF and did her IVF. Retrieved 10 mature eggs and made eight healthy blastocyst. Patient conceived in first attempt and has now delivered a healthy baby.

Digitisation is spreading awareness regarding the issue of infertility

IMPACT OF DIGITISATION

> It helps spread awareness regarding the issue of infertility, the various treatment options available and helps bust various myths which infertile couples are facing.

UNIQUE CLINICAL CASE

A 32 year old presented to us as a case of primary infertility with grade four endometriosis and recurrent implantation failure. She had undergone a laparoscopic ovarian cystectomy along with adhesiolysis in view of chronic pelvic pain three years back. Post her surgery for endometriosis she underwent four cycles of ovulation augmentation with both oral ovulogens and gonadotropins followed by three cycles of IUI. She underwent two consecutive IVF attempts two years back. In her first cycle she had a fresh embryo transfer in which good quality cleavage stage embryos were transferred followed by a frozen embryo transfer in which two good quality blastocysts were transferred. In her second IVF cycle a freeze all strategy was employed and she underwent two frozen embryo transfers, each involving transfer of two good quality blastocysts. However her urine pregnancy test was negative.

Another cycle of IVF followed by a frozen embryo transfer, retrieved 12 oocytes out of which 10 fertilised and had five good quality blastocysts that were cryopreserved. Performed ERA in an HRT cycle and the ERA result came as post receptive (P+4.5 receptive) and it was recommended to perform the blastocyst transfer 12 hours prior to the scheduled time. A frozen embryo transfer was performed in which two good quality blastocysts were transferred as suggested by the ERA test. Her urine pregnancy test was positive after 14 days. An ultrasound performed one week later showed a single intrauterine pregnancy with a gestational sac diameter corresponding to 5w2d.

Dr Jasneet Kaur

Consultant, Milann Fertility Center, Chandigarh

She is an expert in dealing with the entire spectrum of infertility including challenging cases like patients with multiple IVF failures, repeated pregnancy losses, poor egg reserve and patients requiring fertility preservation. She firmly believes in delivering quality, evidence based care to her patients and is well trained in the present scenario of fertility challenges.

ICSI two oocytes lead to couple being blessed with twins

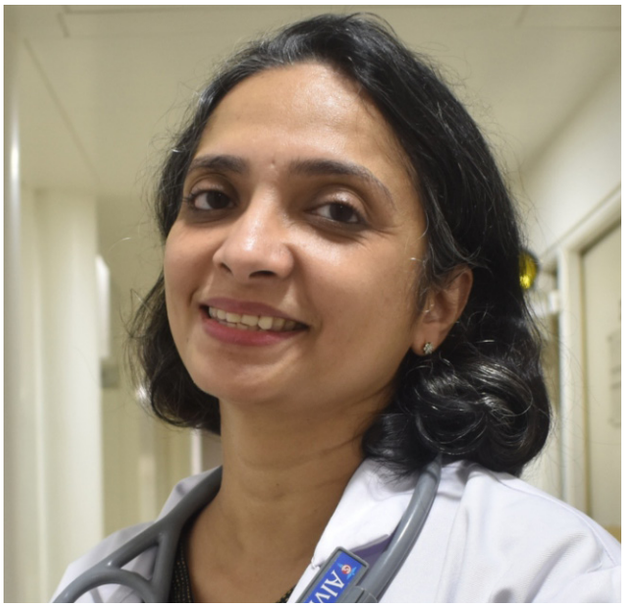
IMPACT OF DIGITISATION

Despite the growing awareness of fertility treatments, there is still a lot of apprehension and hesitation among couples in sharing their fertility journeys. The stigma associated with the inability to conceive naturally and willingness to discuss conception problems can be overcome through content created with experts and distributed through digital platforms. At Sitaram Bhartia, we have an active fertility blog that is used to disseminate accurate information to even people in Tier II-III cities who may not have access to proper resources. By reaching over 73,000 people in 2021 through digital means, we believe we are empowering women and couples to start conversations, overcome inhibitions and take the next step to get closer to realising their dreams of having children.

UNIQUE CLINICAL CASE

A couple where the husband had undergone liver transplant and the live liver donor was the wife. Long term immunosuppressants used for his liver transplant treatment and due to some previous comorbidities such as obesity, he seemed to have suffered an insult and had azoospermia.

On further investigations and ultrasound ordered by the urologist, it was found that his hormonal levels were normal and the couple was counselled to undergo TESE (testicular sperm extraction) with guarded prognosis. Only two sperms were obtained from the sample and were frozen by special techniques. The wife was motivated to undergo ICSI cycle with knowledge of this. However, both husband and wife declined for use of donor sperm along with this surgically retrieved frozen sperm. So ICSI was done only on two oocytes and both were implanted and many thanks to all who were involved in her journey, she was blessed with twins.



Dr Priti Arora Dhamija

Senior Consultant, Obstetrics & Gynaecology & IVF Admin Lead, Sitaram Bhartia Institute of Science and Research, New Delhi

Dr Dhamija emphasises on minimum medical interventions and is very selective in choosing patients for IVF treatment. In her experience, proper preconception counselling and creating a treatment plan customised to a couple's needs can go a long way in helping them conceive.

Maintain detailed patient identification records to safeguard against malicious medico-legal challenges

IMPACT OF DIGITISATION

"Use of artificial intelligence (AI) for selecting optimal stimulation protocols and embryo selection models helps in maximising success rates. Robotic procedures in the embryology lab is another technological innovation helping to improve outcomes. The future of infertility treatment is closely intertwined with technological advances Previously, figuring out exactly what is going on with each individual woman's cycle or a couple's fertility required a lot of journaling, doctor's appointments, temperature taking and waiting."

UNIQUE CLINICAL CASE

A case of a young couple in which the male partner was azoospermic. Despite counselling, the male partner did not consent for usage of donor semen for IVF. He opted for medications including antioxidants and multivitamins to improve semen parameters. Three months later, patient's repeat semen analysis revealed normal semen parameters. Despite limited success with use of such medications, such astounding success was unheard of. Since a detailed identification record of every patient is maintained, including fingerprint impressions, decided to cross check the same. Fingerprint comparison revealed different set of fingerprints of the male partner with rest physical parameters including age, height, weight being an exact match. The patient had asked his identical twin to impersonate him on the next visit. This case emphasis the importance of maintaining detailed patient identification records in order to safeguard against potentially malicious medico-legal challenges.

Dr Parul Aggarwal

Consultant, Reproductive Medicine & IVF Specialist, Milann Fertility,
New Delhi

Dr Aggarwal's key functional areas include critical analysis and evidence-based care in reproductive medicine, including handling subfertile and infertile patients. She believes in the ethical treatment of patients with empathy and aim to practice correct diagnosis, appropriate treatment, timely intervention, an appropriate surgical procedure with responsibility.

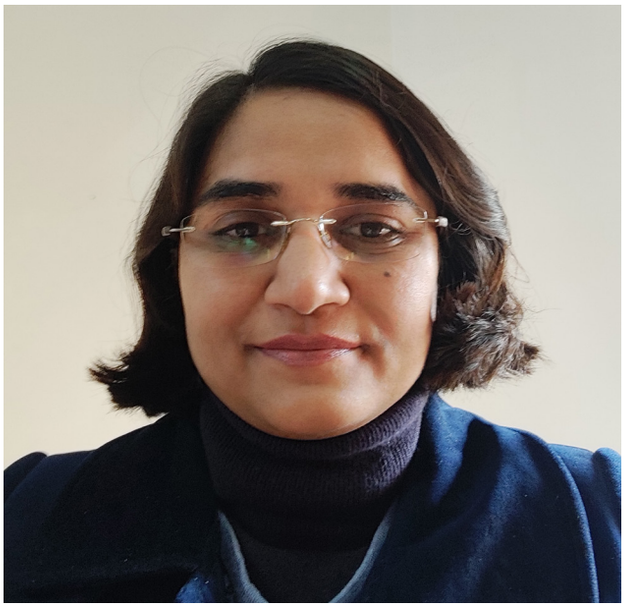
Plethora of knowledge is available to masses, lessening stigma of IVF

IMPACT OF DIGITISATION

"Digitalisation has revolutionised the whole fertility practise. It has provided plethora of knowledge to the infertile couples through internet and has lessened the stigma in society associated with it. Couples are coming up from remote areas to seek treatment. Couples are more informed than before.These couples take an active part in counselling and treatment plan discussion. IVF labs are better monitored by digital monitoring systems and data management tools have saved precious time of embryologists and clinicians."

UNIQUE CLINICAL CASE

A 28 year old surrogate to a couple was complaining of bleeding from vagina on and off for two weeks. She was 11 weeks ongoing pregnant with a single baby. Her ultrasound report was normal. Pap smear and examination of cervix done before embryo transfer was normal. On examination a strawberry shaped growth on the lip of cervix was found. Growth was very soft, friable and bled during biopsy, the report of tissue came as hydatidiform mole. According to the IVF record file, two day three embryos were transferred. IVF was done by some other doctor. In this case it must have happened that one of the embryos had dropped down to implant at the cervical lip and developed into hydatidiform mole. This lead to repetitive bleeding episodes. The whole of molar tissue was removed with continuing intrauterine pregnancy. Her further course of pregnancy was normal and she vaginally delivered a healthy female baby weighing 2.8 kg at term. She was monitored throughout pregnancy and post delivery with serum beta HCG levels (blood test) and per speculum examination and she had normal findings throughout her surveillance period.



Dr Navjot Kaur

Consultant, Reproductive Medicine, Milann Fertility Center, Chandigarh

Dr Kaur has special interests in managing infertility due to PCOS, endometriosis, low ovarian reserve. She has keen interest in managing male infertility. She personally feels that motherhood is the right of every women and she feels herself lucky to be able to bring light of happiness into life of infertile couples.

Telemedicine has connected patients from areas with fertility experts

IMPACT OF DIGITISATION

"Digitisation is a big boon to all the medical fields. By means of digitisation we have been able to fulfil our social responsibility of creating awareness more effectively. We have been streaming fertility related informative videos, articles across the various platforms. Additionally live sessions are also being utilised to spread awareness. Telemedicine is the another platform by we which have been able to outreach many patients requiring fertility consultations in distant remote locations. Overall digitisation in fertility segments has been quite fulfilling for us."

UNIQUE CLINICAL CASE

A 31 year old married nulliparous lady was diagnosed with grade III intraductal carcinoma of the right breast. She underwent right mastectomy with ipsilateral axillary lymph node clearance. Before initiation of chemotherapy, she was referred to us. Controlled ovarian stimulation was done, five good quality embryos were preserved. Further, she received chemotherapy including four cycles of doxorubicin and trastuzumab for one year. During her remission period in 2019, she was keen for conception. AMH levels were checked to assess her ovarian reserve. AMH levels came out to be quite low (0.06 ng/dL), confirming the gonadotoxic effect of chemotherapy. Clearance from her breast oncologist was obtained and natural cycle frozen embryo transfer (FET) was planned. She conceived in her first FET cycle and now she is a mother of 17 month old girl.

Dr Shikha Sardana

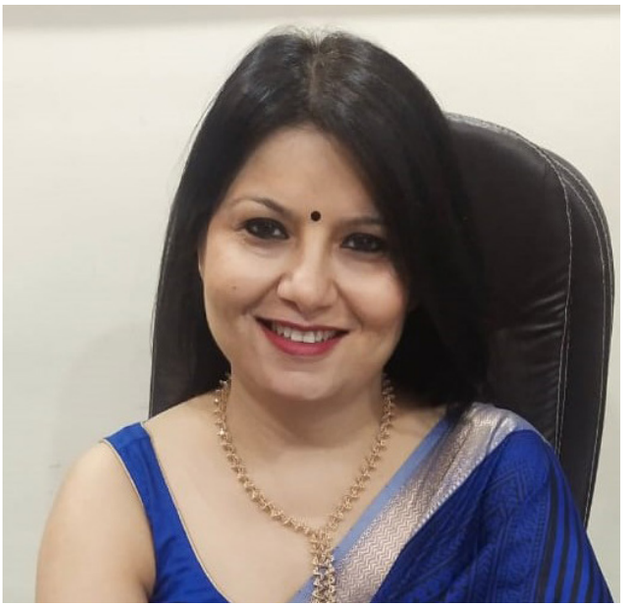
Consultant, Reproductive Medicine, Milann Fertility Center Chandigarh

Dr Sardana has more than 12 years of experience in male-female infertility. Renowned for handling high risk cases, she has successfully performed numerous IUI, IVF-ICSI cycles, fertility enhancing surgeries(hysteroscopy, laparoscopy and open surgeries). Her area of interest are fertility preservation, polycystic ovarian syndrome, recurrent implantation failure & male infertility.

Technology is a boon as long as it is affordable

IMPACT OF DIGITISATION

"Through technological advancements like Big Data, we can understand which protocols work best based on a host of factors that comprise an individual's personal fertility profile, including age, ethnicity and health history, to name a few. But, technology is only good if a common man can afford it. So, keeping this approach in mind, we have made our fertility treatments more affordable."



Dr Akta Bajaj

Senior Consultant and Head, Obstetrics and Gynaecology, Ujala Cygnus Group of Hospitals, Delhi

Dr Bajaj has left no stones unturned to serve the underprivileged section of the society. She never said no to any COVID-19 patient and rather performed many successful high-risk deliveries of COVID-infected mother and child in the slums of Delhi.

UNIQUE CLINICAL CASE

The patient had heavy bleeding after delivery, which took place at her home by a trained midwife. Seeing her deteriorating condition, the family members of the patient decided to shift her to a hospital. Her haemoglobin levels was four grams and she developed secondary infection due to the inversion uterus. Started off with broad spectrum antibiotics to control the infection. Blood transfusion was done, when haemoglobin level reached 9 gram, infection was controlled and TLC count was normal, then surgery was performed. It was a vaginal surgery and patient didn't get any cut or scar in the abdomen and successfully uterine inversion was repositioned. After this, she stayed in the hospital for four days and was discharged in a good condition.

4.8 kg big fibroid removed through laparoscopy, uterus preserved

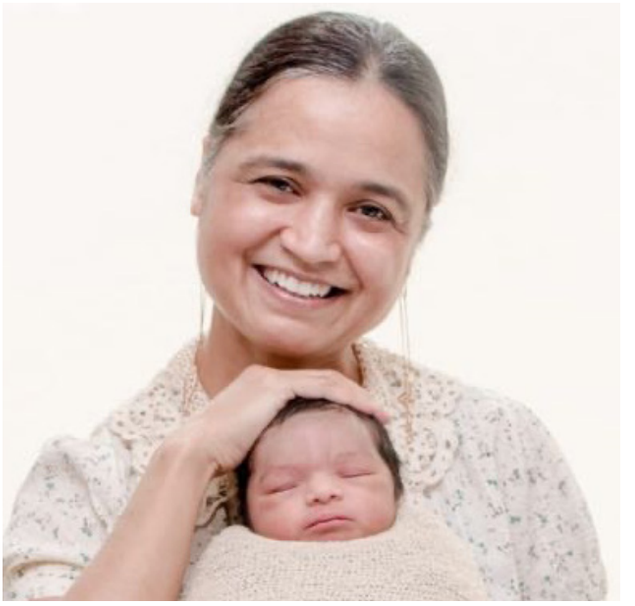
IMPACT OF DIGITISATION

"Fertility encompasses various organ systems. Effects of unhealthy lifestyle, lack of social interaction, psychological pressure and scarcity of time, on fertility are quite severe. With the help of online consultation:

- Counselling
- Describing the anatomy , physiology of male and female reproductive system
- Psychological aspect around conception
- Nutritionist advice on healthy diet for optimum BMI
- Online yoga, exercises
- Teaching monitoring of ovulation
- Methods to improve chances of ovulation and better sperm quality
- Visits only for procedures Above are the points which we are following with online means."

UNIQUE CLINICAL CASE

A 39 year consulted for swelling of tummy and bloating. Being a mother through caesarian section seven years ago. Since then she was not able to conceive naturally. A fibroid of six cm was diagnosed but surgery was deferred due to unwillingness of patient. Five years later the ultrasound showed increase in the size of fibroid to 28 cm. Laparoscopy / minimally invasive surgery: - Four ports or very small 5 mm incisions were given on the abdominal wall to insert laparoscopic instruments. A huge fibroid occupying the abdominal cavity from end to end was separated from the uterus and removed with a special instrument called morcellator in long strips like ribbon. Uterus was stitched back to its original normal shape. Fallopian tubes were checked for patency. No stitches or scar was visible after removing 4.8 kg big fibroid from the uterus.



Dr Aruna Kalra

Senior consultant and Director OBGYN, CK Birla Hospital, Gurugram

Dr Kalra brings 23 years of experience in her field of practice. Her expertise lies in minimally invasive gynaecological surgeries, high-risk pregnancies and vaginal birth after caesarean (VBAC) and scarless laparoscopic surgery. She is also the MD of Mums Clinic in Gurugram.

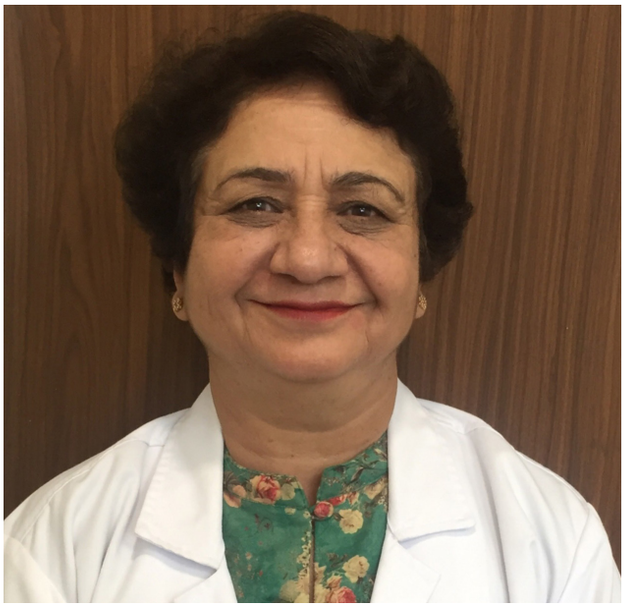
Ashermans syndrome patient successfully delivers

IMPACT OF DIGITISATION

> Digitalisation has had a breakthrough impact on the embryology lab, selection of embryos with the help of artificial intelligence, lab monitoring, knowing common features in repeated failure by data collected, matching donors and recipients. Various digital platforms have helped in educating the common population regarding premature ovarian failure, egg freezing as a need of the hour which was not possible without digitalisation.

UNIQUE CLINICAL CASE

A 35 year old female with history of no periods without medication and infertility of 10 years consulted. She had undergone every possible treatment like IUI many times, 5-6 cycles of IVF, and surrogacy at various places with no results. She had also undergone hysteroscopy twice. She was also a case of tuberculosis (TB) and had taken treatment for it. On examination it was found that she still had eggs in her ovaries but had stopped periods due to additions in the uterus (Ashermans syndrome). Treatment was split in two phases, first egg collection second laparoscopy and hysteroscopy. Some eggs were fertilised and one good blastocyst was made, few day three embryos were frozen. With hysteroscopy fluid was removed from abdomen, patient was put on hormonal treatment for a month, transferred one blastocyst plaster which was frozen earlier into her uterus. Pregnancy test came positive, she delivered prematurely.



Dr Beena Muktesh

Clinical Director Fertility, Cloud Nine Group of Hospitals, Gurugram

Dr Muktesh has experience of 38 years in the field of Obst and gynaecology, 20 years in the field Reproductive Medicine and IVF. My biggest interest and achievement is to conduct training courses for budding Gynaecologist and embryologist. My biggest interest is to treat my suffering patients and help them achieve parenthood.

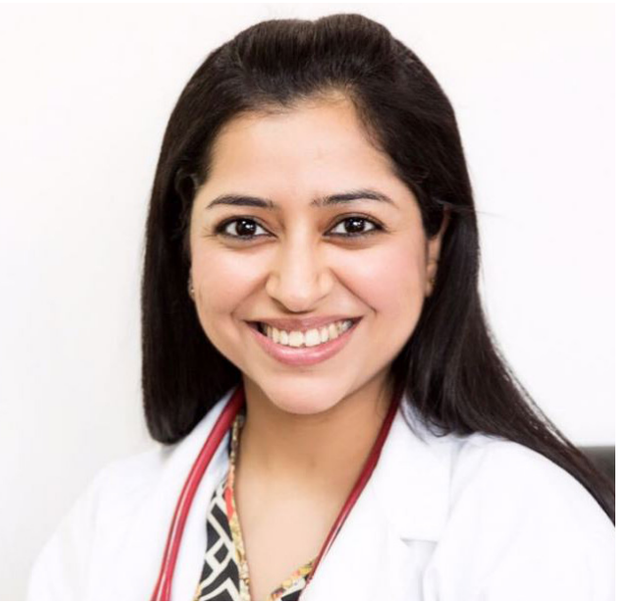
Couple conceived after eight IVF failures

IMPACT OF DIGITISATION

"It is important to value technological advancements & innovations. IVF clinics have been constantly expanding in India's Tier II-III cities, thereby bridging the accessibility gap and making quality fertility treatment available to masses. Technology is only good if a common man can afford it, and with this approach, fertility treatments have become more affordable to common masses in India. It has not only positioned the Indian Fertility Markets to newer heights but also has set up a platform for future dynamic growth."

UNIQUE CLINICAL CASE

A couple was desperate for a child for 11 years. Anjali and Vinod belonged to poor socio economic status and sold off their lands for their previous eight IVF failures. The family was very apprehensive and explained how this is going to be their last attempt as they were losing all hope. They conceived in the first attempt, the couple was given desired concession. They welcomed a healthy child at the end of 2021.



Dr Neharika Malhotra

Consultant, Rainbow IVF and Malthotra Nursing and Maternity Home, Agra

Dr Malhotra fondly known as 'Doctor Didi' in Agra and the nearby region. She is the Director of Smriti NGO & Rainbow Wellness, and an active Executive Member of Indian Human Rights Organization of Agra.

Digitisation has made record maintenance easier

IMPACT OF DIGITISATION

"Digitisation is the way forward. It helps to plan, track appointments. As a patient requiring fertility needs several follow ups. Some appointments can be scheduled online which may save lot of time for patient. Also maintaining reports taking second opinion becomes easier."

Dr Komal Chavan

Medical Director, Chavan Maternity and Nursing Home, Mumbai

She has special interests in high risk obstetrics, infertility gynaecological major surgeries, NDVH, adolescent health problems and family welfare. She is also the Chairperson of Medical Disorders in Pregnancy Committee at FOGSI.

UNIQUE CLINICAL CASE

A 38 year old married for six years with BMI of 28 came for check up. The patient was very anxious to conceive, she was an occasional smoker. She had been diagnosed with PCOS and hypothyroidism. Patient was thoroughly counselled to loose weight and make lifestyle modifications. Hystero laproscopy was done which was normal. Husband semen analysis for borderline. Husband was put on co enzymes. Patient was started on metformin. She conceived after third cycle of ovulation induction with IUI. During pregnancy she developed GDM. Antenatal period was thoroughly monitored by first trimester anomaly scan, markers. She developed pre-eclampsia and baby had IUGR. At 31 weeks doppler reports showed severe compromise with absent blood flow so decision to terminate pregnancy was taken. Patient underwent LSCS, baby weight was 1.4 kg kept in NICU. Mother was discharged after 10 days and baby after three weeks.

8kg fibroid removed from 40 year old, conceives naturally post surgery

IMPACT OF DIGITISATION

"Digitisation is the need of the hour in medical field as it eases the work, shortens the duration utilised for keeping records and reduces the man power. In fertility practice maintaining records , analysing previous treatment protocols, pulling out important past investigation reports, analysing success and failure rates of treatment protocols is just a click of button. Artificial intelligence (AI) is another arm extended because of digitisation and proving to be quite impressive in helping fertility consultants to choose appropriate treatment methods for different kind of patients."

UNIQUE CLINICAL CASE

A 40 year old woman with a large watermelon size uterine fibroid wished to conserve her uterus and plan for conception. Three years ago a patient came the above description came for fourth opinion. Myomectomy was performed, 8kg fibroid was removed and uterus conserved, after ruling out the important leiomyosarcoma.

Myomectomy would be associated with massive bleeding specially in these cases where the uterus is hugely enlarged extending upto the chest level with constant difficulty in walking like carrying nine months pregnant size uterus, associated with difficulty in breathing. With preoperative and surgical due precautions myomectomy could be done with significant blood loss. After two days of ICU care and replacing her lost blood, she recovered completely. She conceived naturally without treatment.

Dr Vijay Kumar CR

Managing director, Gynecare Hospital, Bengaluru

Dr Kumar CR is a Professor at Dr BR Ambedkar Medical College, Consultant at Motherhood and various other hospitals, Jnt Treasurer at BSOG and Consultant Gynaecologist, Consultant Urogynecologist, Gynae Laparoscopic surgeon.

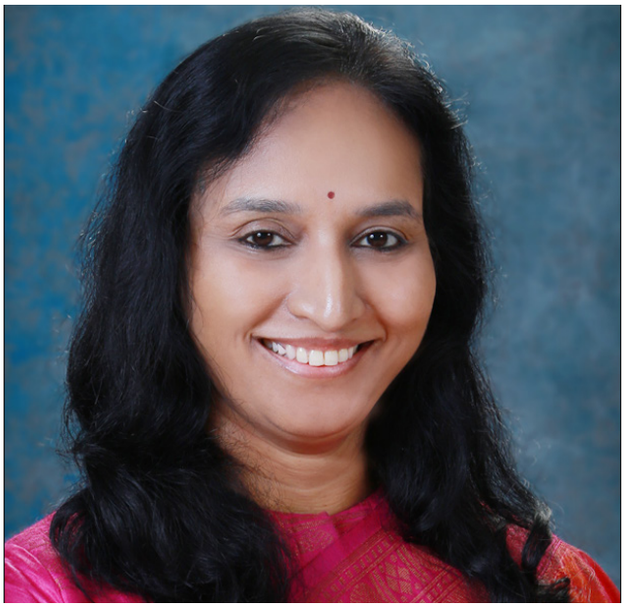
Publication of educational content, virtual consultations have increased patient engagement, accessibility

IMPACT OF DIGITISATION

"Publication of educational content, virtual consultations, and automated chat- boxes have increased our patient engagement and accessibility almost exponentially. Digitising our patient records has allowed us to completely revolutionise the manner in which we deliver a truly personalised fertility care. Moreover, we are proud to be able to offer an exceptionally high quality IVF service by removing manual errors using our Electronic Witnessing System."

UNIQUE CLINICAL CASE

A couple with female aged 27 years and male aged 30 years presented with history of primary sub-fertility primarily due to endometriosis-grade 3 at recent laparoscopy for further treatment. Female conceived in first cycle of IVF, unfortunately ended as an ectopic pregnancy and underwent laparoscopic right salpingectomy. Two further frozen embryo transfers (FET) were carried out which ended as a biochemical pregnancy and a miscarriage at around seven weeks gestation in the second FET cycle. Couple underwent two further fresh IVF cycles with PGT-A which were negative. Two further cycles with donor egg also yielded one more biochemical pregnancy and a negative result in the second cycle and the couple further underwent two cycles of surrogacy which also were negative.



Dr S Vyjayanthi

Medical Director and Fertility Specialist, Mother To Be Fertility, KIMS Fertility Centre, KIMS, Hyderabad

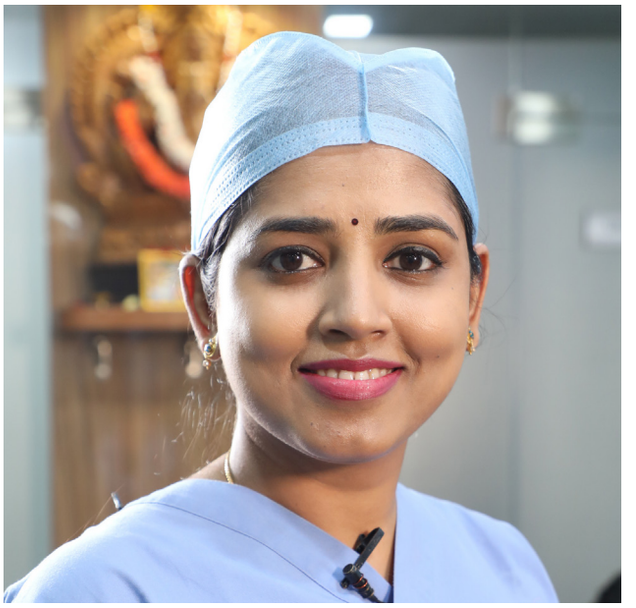
Dr Vyjayanthi is an eminent Fertility Specialist with more than 20 years experience in the field of fertility and has performed more than 10,000 cycles of IVF.

These treatments happened over a period of 4-5 years and subsequently the couple were divorced. The female partner got remarried and found herself pregnant spontaneously eight months into her marriage and went on to deliver a healthy baby at term.

Technology is assisting fertility centres reach out to their target population

IMPACT OF DIGITISATION

> There is lot of content available online which makes it easier for them to understand when we explain. It also makes fertility centres to reach out to their target population to propagate their facilities and healthcare. On the legal front, all the records at my clinic are digital now and so data maintenance becomes easy including documentation and consent forms.



Dr Usha BR

Consultant ObGyn, Laparoscopy and Fertility, Cloudnine Hospitals, Bengaluru

Dr Usha has a passion for treating infertility and high risk pregnancy. Her expertise also includes laparoscopy and hysteroscopy. An essential part of Dr Usha's practice is dedication towards her profession and in turn her patients. She wants to see her patients sail through conception easily and go home with a healthy baby.

UNIQUE CLINICAL CASE

A 27 year old who came with urinary tract infection after two months of marriage. Ultrasound showed multiple fibroids in the uterus and the largest was 15cm in size and was present anteriorly. This fibroid did not cause menstrual issues to her. During surgery fibroids ranging from 7-15cm were removed. Myoma bed were sutured in two and three layers. She was advised contraception to not conceive for six months and was also advised long acting GnRh agonist injection to prevent recurrence of fibroids. She later tested positive with eight weeks pregnant. The journey during pregnancy was not easy. The eight weeks ultrasound had shown two new fibroids around 2cm that kept growing during pregnancy and became four in number and about 5-6cm by the time of delivery.

Pregnancy was pushed till 37 weeks, during surgery fibroids were first and then deliver the healthy baby, 3kg who is doing well today.

38 year old with unicornuate uterus conceives on first attempt

IMPACT OF DIGITISATION

> Digitisation has helped streamline data collection and analyse ones practice. Artificial intelligence (AI) can be used as predictors of response to controlled ovarian stimulation, decide which embryos to selected for transfer.

UNIQUE CLINICAL CASE

A patient with poor ovarian reserve and endometriosis helping her conceive with pooling of embryos. 38 years old with a unicornuate uterus and a rudimentary noncommunicating functional horn with previous miscarriage who conceived after transferring one embryo. The chances of her conceiving were quite low, in view of reduced eggs and anomalous uterus.

Dr Nivedita Shetty

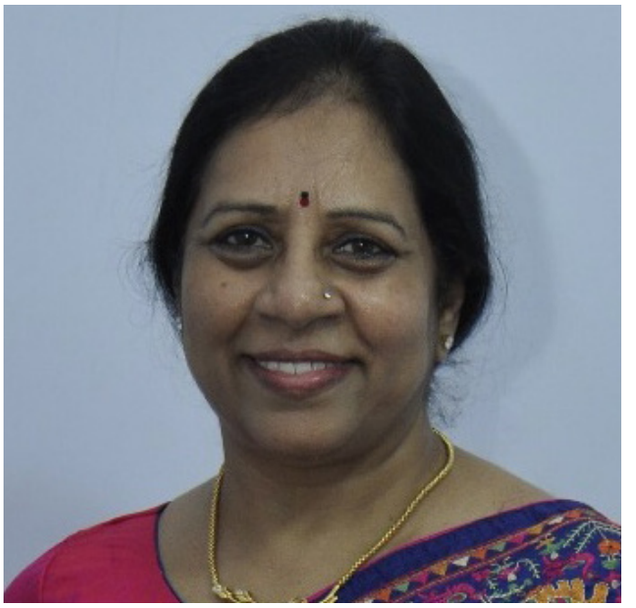
Director, ART Unit, Manipal Hospital, Mysore

Practicing fertility treatment exclusively over the last 15 years. Involved with the Indian Society of Assisted Reproduction (Karnataka Chapter) in various capacities.

Digitisation has been instrumental in bridging gaps in healthcare delivery

IMPACT OF DIGITISATION

"The advent and success of digital medicine in all its forms maybe one of the most notable milestones in recent times. OBGYN has always been a field that has required a personal touch. Telemedicine and online consultations have been instrumental in bridging gaps, but fall a step short of the effectiveness that an in person consultation provides. It has the advantage of access and convenience especially for women from remote areas, differently abled etc. As times change, so do the practices and the right way forward."



Dr M Krishna Kumari

Professor/ Senior Consultant, Apollo IMSR, Medicover Hospitals, Hyderabad

Dr Kumari has 25 years of teaching experience and 30+ years of clinical experience. She has served in various capacities in the Hyderabad Society of Obstetricians and Gynaecologists (OGSH). Her passion is updating knowledge, practical applications, documentation and transferring knowledge.

UNIQUE CLINICAL CASE

A 26 year old with regular menstrual cycles complained of lower abdomen pain, dyspareunia and dysuria for five days. On examination, abdomen was soft; per speculum- cervix was pin point; bimanual examination- uterus was 12 - 14 weeks size, mobile, nontender and no adnexal masses. Ultrasound pelvis showed fluid in endometrial cavity, small endometrioma in left ovary with low level echoes. Findings confirmed by MRI. During procedure no curettings were obtained and was repeated under USG guidance. Laparoscopy showed myometrium at the niche site thinned out to a few mm. The scar incised, tissue extracted, edges freshened and closed. Left ovary cystectomy done. Histopathological examination showed endometrioma of the ovary and the scar tissue showed chronic non specific emdometritis. Post op Beta HCG was less than 1. The diagnosis could be an isthmocele or scar endometriosis.

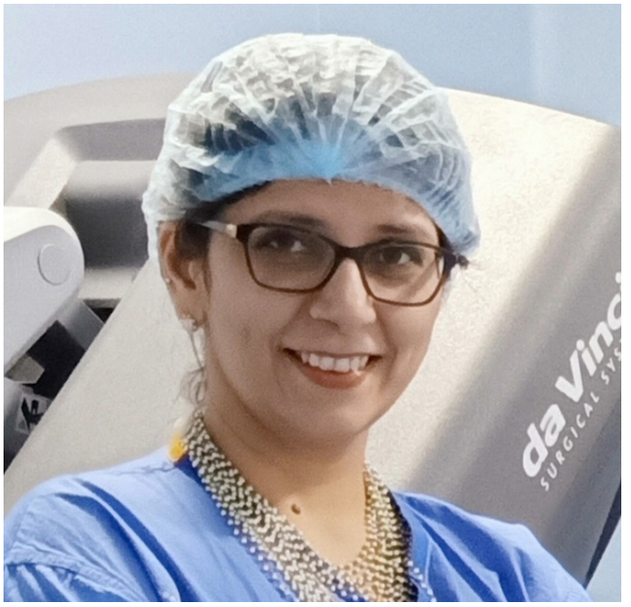
Newer technologies reducing endometriosis, responsible for 30 per cent infertility in women

IMPACT OF DIGITISATION

"Endometriosis is a cause behind 30 per cent of the total cases recorded of infertility in women. Ultrasonography of pelvis will reveal only 40 per cent of ovarian cysts with 60 per cent of cases getting missed. Signs of endometriosis such as sliding sign and doppler imaging, use of contrast in vagina can help detect pouch of douglas endometriosis and uterosacral nodules."

UNIQUE CLINICAL CASE

A 40 year old with known case of endometriosis who had hysterectomy with excision of endometriosis. She had pain on walking and chronic pelvic pain with no response to medical management. A thorough clinical examination showed pain at S2, S3 nerve roots which was cyclical. Her ovaries were conserved with no obvious sign on ultrasonography. MRI pelvis showed an endometriotic plaque on the sacral nerve. Laparoscopic surgery was performed to dissect retroperitoneally up to the sacral roots and the plaque excised. The given treatments helped the patient recover completely and have resolution of their pain.



Dr Anshumala Shukla Kulkarni

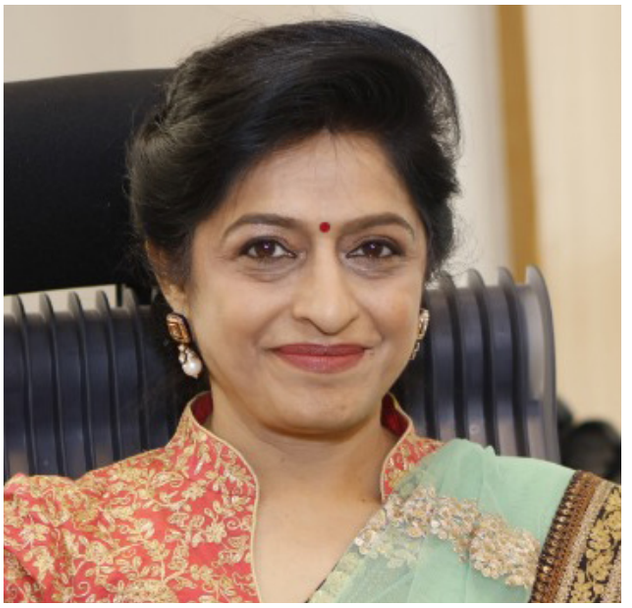
Head, Minimally Invasive Gynaecology, Kokilaben Dhirubhai Ambani Hospital, Mumbai

Dr Kulkarni is passionate about minimal access surgery, she has been working at Kokilaben Dhirubhai Ambani Hospital for the last 13 years. Utilising innovative methods for complex surgeries, she has pushed the limits of what's possible with the scope and successfully handled complex cases.

Bone marrow derived cell concentrateinstilled in infertile female with thin endometrium leads to live birth

IMPACT OF DIGITISATION

"Surely, digitisation has helped a lot in the times of pandemic. We have shifted to telephonic consultations due to COVID-19, Awareness programmes for all anxious couples in the pandemic and e-fertility treatments."



Nayana H Patel

Medical Director, Akanksha Hospital & Research Institute, Anand

She is considered a pioneer in the field of IVF and surrogacy in India. She held the post of President of State Obst & Gynaec Society of Gujarat (SOGOG) in 2010 and is the Founder President of Gujarat Chapter ISAR.

UNIQUE CLINICAL CASE

Inspired by a famous fertility cell therapy performed in Spain, bone marrow derived cell concentrate was instilled in the uterine artery spiral arterioles via interventional radiology in a infertile female with thin endometrium leading to a live birth of a healthy baby. This case is first of its kind in the world and even the case report was published in an international journal.

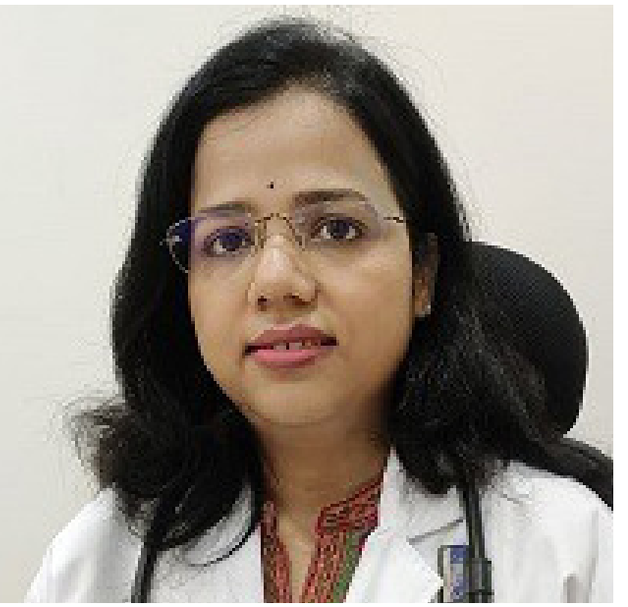
Infertility involves social stigma, patients research prior to consultation

IMPACT OF DIGITISATION

"Digital mediums have become very important means to reach out to masses. Nowadays, infertility is on exponential rise due to late marriages. People try to plan everything in their life, so many times fertility is kept on lower priority in initial years of marriage which leads to both primary/ secondary fertility later. Since infertility involves social stigma, people like to research before approaching anyone for consultation. Besides, digital media may provide more educational material which can be used to make patients understand their problem better & hence makes it easier to convince them."

UNIQUE CLINICAL CASE

A 38 year old, P1+1, patient who was a known case of adult onset polycystic kidney disease, a case of hypertension & hypothyroidism was presented as the case of secondary infertility due to premature ovarian failure. She was offered egg donation in lieu of premature ovarian failure. She also needed hysteroscopic metroplasty in lieu of a thin endometrium & t shaped cavity. Later a good quality D5 blastocyst embryo was transferred after preparing her endometrium with optimal dosage of estradiol hemihydrate. Resulted in a positive beta HCG test after 14 days of embryo transfer & a single live pregnancy later.



Dr Shiwali Tripathi

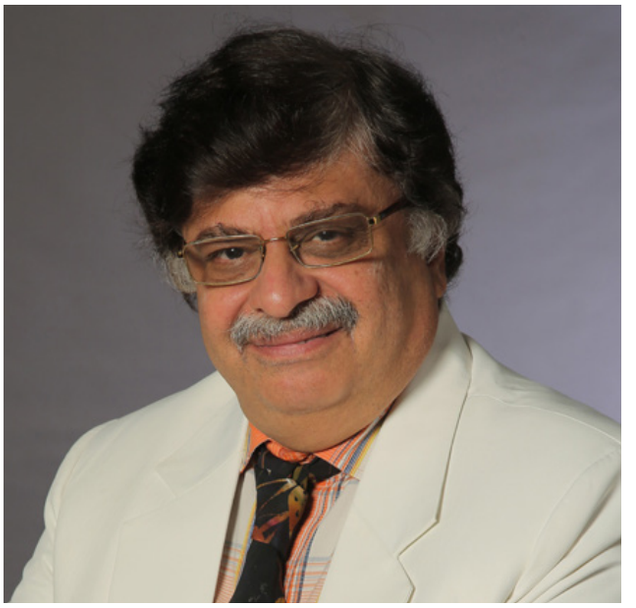
Consultant Fertility Expert, Apollo Fertility Centre, Varanasi

Dr Tripathi has a keen interest in infertility & it's management, She has sharpened her skills in ART, ultrasonography & gynae endoscopy, clinical embryology & andrology. She started working as a Consultant Fertility Expert with a renowned IVF chain in the country & helped thousands of couples struggling with infertility to achieve their dream of parenthood from UP & Bihar.

Digitisation has improved access to genuine information from credible sources

IMPACT OF DIGITISATION

"Digitisation has improved the knowledge access of several patients who would like to know the nature of treatment they are going to get. They now have access to genuine information from credible sources, which can save them from being misdirected by unauthentic information given purely to promote a particular product or narrative which is completely unethical in healthcare. Here, digitisation will help the patients seek proper guidance in the fertility segment through genuine sources."



Dr Nimish R Shelat

Consultant IVF Fertility Director, New Birth IVF, Gujarat Institute of Reproductive Medicine, Shree Nandan Hospital, Surat

He is the currently the President of the Gujarat Chapter of Indian Society for Assisted Reproduction (ISAR).

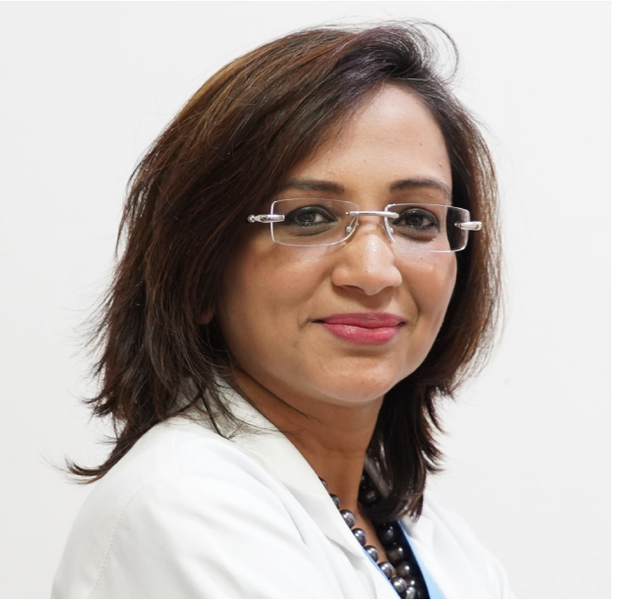
UNIQUE CLINICAL CASE

A young 21-year old married patient was diagnosed with amenorrhoea and infertility. Clinical examination and ultrasound revealed infantile hypoplastic uterus and laparoscopy confirmed nearly streak ovaries. This patient was treated with estradiol valerate in incremental doses over a period of nine months to develop menstrual flow. The small uterus responded favourably to grow larger. Donor eggs were fertilised with her husband's sperm by IVF. Three embryos were developed and transferred after adequate endometrial preparation with oestrogen monitored on colour doppler ultrasound serially. Successful implantation was achieved in the very first attempt with a positive Beta HCG 2045 IU. Pregnancy was confirmed on ultrasound. Pregnancy progressed further to give a live IVF birth by cesarean section to avoid incoordinate uterine action on a developed uterus and risk of labour in such patients.

AI can help in better embryo analysis

IMPACT OF DIGITISATION

"I strongly believe that digitisation is already booming in a segment like fertility segment. There is a greater scope for using technologies like artificial intelligence to do embryo analysis. Additionally during the pandemic, we went completely virtual by conducting Tele-consultations and enabling treatment and patient care for our clients from the comfort of their homes."



Dr Richa Jagtap

Fertility and IVF Specialist,
Nova IVF Fertility, Chembur

She has been practicing obstetrics and gynaecology for over 20 years and reproductive medicine for over 15 years. Her focus has been on ultrasound, fertility medicine and genetic studies in infertile couples.

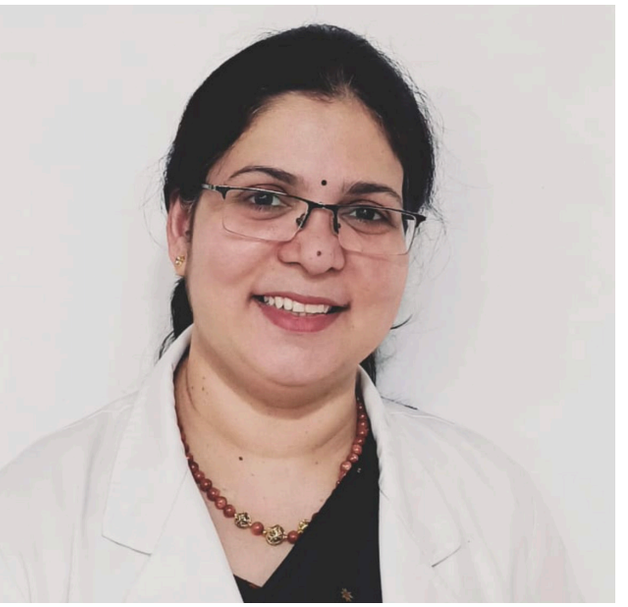
UNIQUE CLINICAL CASE

A 38-year-old lady, consulted in 2020 for a special medical condition. They had a child who was diagnosed with methy malonic acidemia and passed away battling the metabolic disorder. Both the parents had a single copy of the disease-causing gene, which made them carriers and ultimately led to the development of the metabolic disease in their child due to the presence of two copies (one from each parent). After the complete genetic workup was done, the couple started their treatment for IVF. They were keen to do genetic tests to find disease free embryos and then also test those embryos for any chromosomal aneuploidies that are known to arise due to advanced maternal age. The In vitro fertilisation via ICSI was done and resultant embryos were cultured to blastocyst stage. Single PGT-M and PGT-A normal blastocyst was transferred. The patient conceived and recently delivered a full-term healthy baby.

Technology has improved quality of service towards patients

IMPACT OF DIGITISATION

"Patients, medical and paramedical staff have benefited from digitisation. In our fertility practice, we are able to give better services to our patients by using electronic medical record maintenance of patients files, online appointment booking, online consultation automatic email of patients reports so that we have seamless, no hassle experience for our patients during their fertility treatment."



Dr Sunitha Ilinani

Consultant, Infertility and ART specialist, Apollo Fertility Centre, Banjara Hills, Hyderabad

Dr Ilinani has 18 years of experience in treating sub-fertile couples and 13 years experience in the field of assisted reproductive technology and endoscopic surgery. Her areas of special interest are management of recurrent IVF failure patients, poor responders, fertility preservation, managing infertility in endometriosis and PCOS patients.

UNIQUE CLINICAL CASE

A couple married for eight visited for fertility treatment. Couple previously gone through 13 cycles of ovulation induction and nine cycles of intrauterine insemination (IUI) with no positive outcome. The patient was found to have thin endometrium which could possibly be the reason for failure to conceive. The couple was counselled for IVF ICSI. A pre-IVF hysteroscopy was done to assess the uterine cavity which was found to be normal. Along with IVF injection, the patient was given PRP treatment to improve the lining, three doses were instilled into the uterine cavity on day six, day eight and on the day of oocyte pick up. The lining dramatically improved from 6mm to 9mm and on day two, top quality blastocysts were transferred which resulted in a positive pregnancy.

India's first Testicular-ICSI baby was born in 1993

IMPACT OF DIGITISATION

"I started the first website in India to educate patients about IVF at www.drmalpani.com. I have been prescribing Information Therapy at www.ivfindia.com to help ensure that IVF patients get the best medical care, and my YouTube Channel has over 7000 subscribers. I offer a free second opinion to IVF patients from all over the world."

Dr Anjali Malpani

IVF Specialist - Medical Director, Malpani IVF Clinic, Mumbai

She started the first support group for infertile couples in India called Infertility Friends in She has founded the world's largest free patient education library, HELP, at www.healthlibrary.com. As a philanthropist, she funded the MICE (Medical Innovation Creativity and Entrepreneurship) Lab at JJ Hospital in 2018.

UNIQUE CLINICAL CASE

A patient from Chennai we treated 1993. He had come to me for a consultation in 1989 because he had a zero sperm count due to testicular failure. The only treatment option in those days was to use donor sperm but he was not willing to accept this. The first pregnancy in Belgium in 1992, using Testicular sperm and ICSI was reported. The patient was informed about this new medical advancement six months later and he was very excited that he could use his own sperm to get his wife pregnant. He was really looking forward to undergoing the TESE-ICSI treatment for him. A couple of sperms were extracted that were used ICSI, fertilisation check confirmed the presence of fertilised eggs. Embryo developed beautifully, and we transferred to his wife's uterus. She conceived in her first cycle and now has a gorgeous 27 year old girl.

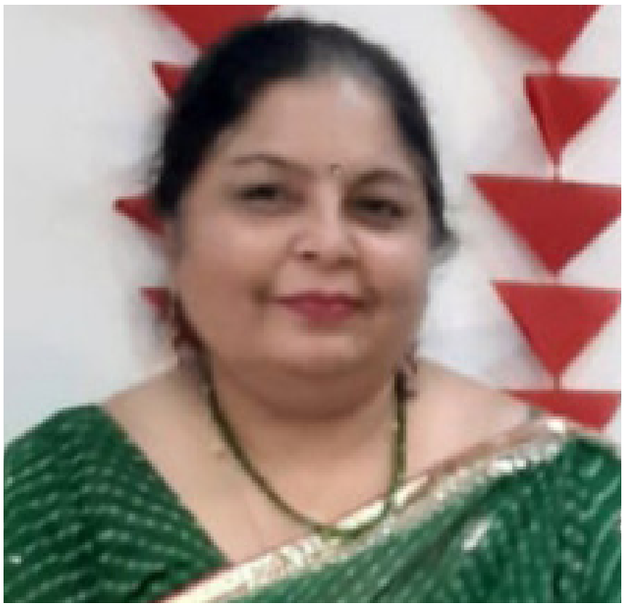
Elderly woman delivers healthy child post three first trimester miscarriages

IMPACT OF DIGITISATION

"Digitisation has made a great impact in fertility management as it has become easier to communicate between service providers and patients. Digitisation has become more relevant during the COVID-19 pandemic when the lockdown made the infertility treatment inaccessible for many patients. Many fertility apps available on the internet have made patients compliant by reminding them to take medicines, track their fertility period amongst others. Digitisation has helped with record keeping and faster communication in case of any medical emergency."

UNIQUE CLINICAL CASE

An elderly civil servant lady had come for secondary infertility treatment. She was depressed as she had three first trimester miscarriages despite receiving treatment. She did not have any gross derangement in her reports. She was counselled for weight reduction as was slightly overweight, lifestyle modification advice was given incorporating counselling for proper nutrition, exercises, yoga and relaxation techniques. She was advised to conceive as early as possible as she was elderly and was explained regarding ways to enhance her chances of conception and supportive treatment was given. The patient had spontaneous conception and continued follow ups despite being transferred to a different city. She carried to full term and delivered a healthy baby.



Dr Anita Rajorhia

Senior Consultant and HOD, Obstetrics and Gynaecology, Dr Hedgewar Hospital, New Delhi

Dr Rajorhia is the Chairperson of Adolescent Health Committee, Association of Obstetrician and Gynaecologist of Delhi. She is an active member of the Endocrinology and Infertility committee of AOFOG and representative of FOGSI to the organisation. She is also the Founder Vice -President of Delhi Tune Forum, South-West.

Technology has brought doctors, patients closer leading to better treatment outcomes

IMPACT OF DIGITISATION

"I believe it has a huge impact on the fertility segment. As a result of the advent of social media and social media campaigning, patient access to social media and doctors' access to digital media is very high, which is going to ease out situations for the patient. Patients will have more opportunities to interact with doctors, and doctors will have more opportunities to interact with patients."

Dr Nilesh Unmesh Balkawade

Clinical Head & Fertility Specialist, Oasis Fertility, Pune

Dr Balkawade offers a decade-long distinctive experience and expertise in the fields of infertility, reproductive medicine and gynaec endoscopy. He has been a faculty at Reproductive Medicine by UNIVERSITATSKLINIKUM Schleswig-Holstein, Germany.

UNIQUE CLINICAL CASE

A 34-year old woman and her 36-year-old husband, married for nine years were desperate to start a family, and had tried several fertility treatments over the past six years, but all in vain. They also suffered from two miscarriages from four IVF cycles. Routine investigations revealed the female had bilateral tubal block, and also had chromosomal abnormalities. However, husband had a normal DFI value of 24 per cent. The couple had to undergo a genetic screening (PGT) of their embryos, before the embryo transfer to increase their chances of conception. In view of the patient's genetic condition- she was counselled for pooling up of embryos, which was later subjected to PGT-A. Later a laparoscopic evaluation was performed on her blocked fallopian tubes and only the normal PGT embryos were transferred. The embryo transfer was successful, resulting in a conception.

Digitalisation of health records is key to effective patient management

IMPACT OF DIGITISATION

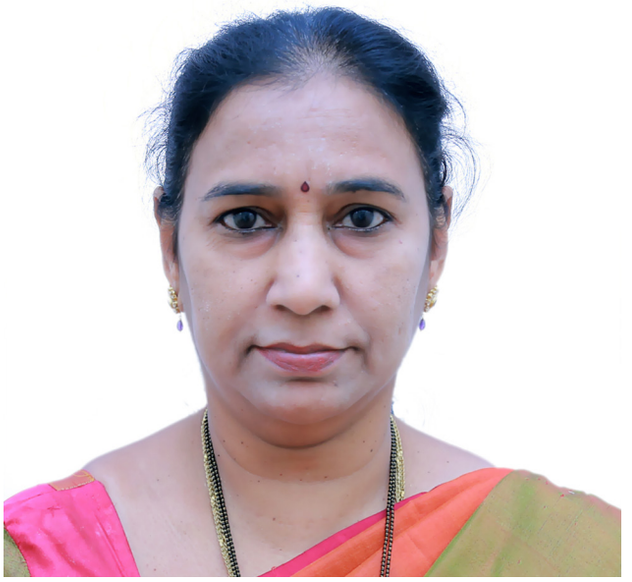
"Digitalisation of the health details are key in patient management. In particular for infertility cases with long medical history this recording of data is important in selecting the right method. Digital images and surgical videos are of critical importance for publications.

Digital support tools, like smartphone apps, are being used alongside fertility treatments. They aim to harness the power of information technology to improve care, facilitate communication and support patients during stressful treatment cycles."

UNIQUE CLINICAL CASE

A 34 year old lady married for two years consulted for infertility. She has menstrual irregularity, polymenorrhoea.
Male partner work up was normal. Investigations revealed hypothyroidism, ovarian cyst.

She was treated with OC pills, hypothyroidism was corrected. Later she was treated with lap ovarian cystectomy. Chromo tubation revealed bilateral patency of the fallopian tubes. With ovulation induction for six months, she did not conceive. Hysterocopy was done small endometrial polyp was identified and removed. She was subjected to IUI. She conceived, but it was a blighted ovum, and underwent medical termination. She had regular periods, subsequently within the next four months she naturally conceived. During the gestational period, Diabetes and mild PIH was detected and treated. Delivered a male baby by LSCS.



Dr Padma Kumari Redlam

Senior Consultant & Head of the Department, Omni Hospitals, Hyderabad

Dr Redlam has worked at Aware Hospital and headed the Gynaecological Oncology Department for five years. She has been working in Omni Hospital since 2010 and has been actively practising high-risk obstetrics, laparoscopy surgeries and infertility. She is life member of OGHS, FOGSI and IMA.

Blind vagina woman conceives through trans-myometrial embryo transfer

IMPACT OF DIGITISATION

> I have made information on infertility more accessible by recording informative videos for patients. We have focussed on video consults wherever possible so that patients have minimum exposure to COVID-19. With a focussed approach towards digitising patient data, we have streamlined our process of recording patient history & prescriptions.

Dr Sandeep Talwar

Senior Fertility Specialist, Nova Southend Fertility and IVF, Delhi

Dr Talwar has over 30 years of experience in virtually all facets of the diverse field of infertility. She is actively involved in teaching DNB students and training Fellows in infertility and reproductive medicine. At present the focus of her work is in the areas of management of recurrent implantation failure.

UNIQUE CLINICAL CASE

A 28-year-old woman was referred with a diagnosis of the blind vagina with cervical agenesis. The patient had recurrent episodes of hematometra. Ultrasonography results showed the endometrial thickness to be 7mm and the right ovary had 6-7 follicles, while the left ovary had 8-10 follicles. Investigations of male partners showed a normal Semen analysis.

The decision of IVF with trans-myometrial embryo transfer was taken. She was started on HMG injections -225 IU with an antagonist protocol. 12 oocytes were retrieved & two good quality blastocysts were transferred using the technique of trans myometrial embryo transfer. The embryo was gently injected inside the endometrial cavity approximately 1.5cm from the fundus of the uterus, luteal phase support was given. After 14 days the Beta HCG report showed a positive report. Ultrasound showed single live pregnancy, the patient is currently on a regular follow up and is progressing well.

ART techniques evaluate both partners for infertility treatment

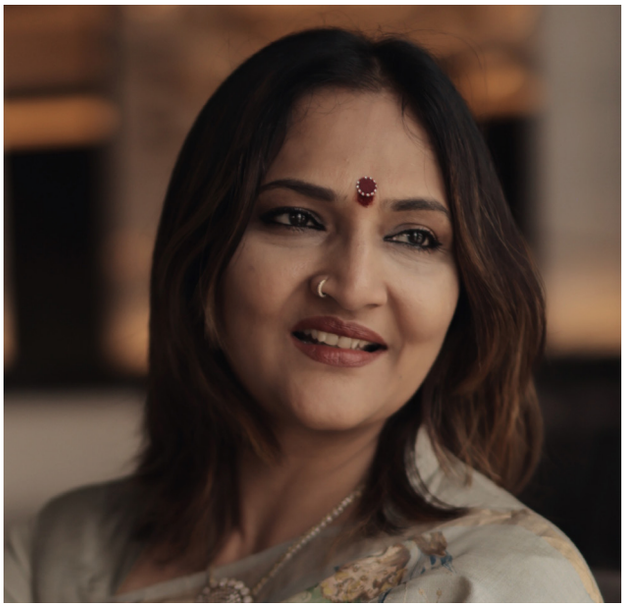
IMPACT OF DIGITISATION

“Enhances the quality of IVF treatment, by improving the success rate in the process of couples conceiving. In ART techniques for infertility treatment, both the partners are evaluated, based on the case history the clinician will help them conceive using the most advanced technique of infertility treatment like PESA, TESA, ERA, non-invasive PGT, BAPC, PRP, LAH.

Oocyte freezing technique opens the window for the couple to get ready for the conceiving process. Once the Woman is ready to bear their offspring, the preserved egg would be implanted back in her.”

UNIQUE CLINICAL CASE

32 year old married for 7 years, trying for a baby for five years. The patient had a history of pelvic endometriosis and one side of poor kidney functioning. Couple was advised for self-cycle IVF with surrogacy. Patient wished to bear her baby, she tried gonodotropins treatment. Four oocytes were obtained, embryos frozen. ERA planned to check the implantation window It keeps the window between day 19-23 of a woman’s cycle. While 80 per cent of women have such window of implantation, around 20 per cent have a displaced, unique window that occurs earlier or later than this expected range. Following the ERA test planned for FET Cycle with blasto-cyct transfer. The patient conceived with Bhcg of 900 with single sac. She delivered a healthy boy baby now one year old.



Dr Swarnalatha S

Director HOD, Sakar World Hospital, Bengaluru

Dr Swarnalatha has an overall experience of 29 years in the fertility sector. She is also a member of several associates including FOGSI, ISAR, ASRM.

Technology deployment in IVF is the need of the hour

IMPACT OF DIGITISATION

"The adaptation of the most advanced treatment approach can guarantee a pregnancy rate of 65-70 per cent per cycle. The entry of digitisation to IVF clinic and the embryology lab is the need of the hour. It is being used to maintain records, tabulate the quality indicators in IVF lab, decrease identification errors and prescribe medications. Artificial intelligence (AI) can be used to select the best sperm for ICSI and prediction of the embryo with the highest implantation potential."

UNIQUE CLINICAL CASE

A 41 year old woman with irregular cycles (once in 2-3 months), presented with secondary infertility. She had a missed abortion at seven weeks gestation, nine years ago. She had one cycle of IVF stimulation cancelled due to poor response, one cycle with embryos arrested. Her BMI was 46.6kg/m2. AMH was 0.46 ng/ml. The couple did not want to use donor egg, IVF/ICSI was planned with embryo freezing. On stimulation, she did well. Eight oocytes were retrieved, seven embryos were frozen on day four. She lost 10kgs in three months by diet and exercise. Cancelled 2FET cycles – 1 cycle as patient turned COVID-19 positive and the other cycle due to thin endometrium. Two good quality blasts in third FET cycle were transferred, she conceived with twins with the first embryo transfer with BHCG 997mIU/ml.

Dr Sneha J

Senior Consultant, NU Hospitals, Bengaluru

Dr Sneha specialises in providing the whole range of infertility treatment starting from infertility workup, laparoscopic, robotic and hysteroscopic fertility sparing surgeries, ovarian stimulation, IUI and, IVF /ICSI treatment with good success rate. Her expertise lies in treating patients with PCOS related infertility, recurrent IVF failure, and endometriosis.

Couple with six failed IVF cycles conceives twins

IMPACT OF DIGITISATION

"Digital fertility solutions will provide highly curated data on the physiological changes men and women undergo during infertility treatment. Paired with guidance, remote monitoring devices and digital companions provide patients with highly personalised ways to navigate their fertility journey, and much needed support for complex treatment protocols.

Data captured through increased remote monitoring devices and adherence platforms can create a repository of robust clinical information to enhance diagnostics and the development of therapeutic options."

UNIQUE CLINICAL CASE

A couple with six previous failed IVF cycles conceived twins. The couple who had undergone six prior IVF cycles at other clinics consulted requesting for surrogacy as a last resort. A proper investigation was done IFV was decided upon with the right approach. Keeping in mind about the previous IVF failure, decision was made to go for stem cell therapy to improve the chances of successful implantation. The treatment had reaped excellent results in previous recurrent IVF failure cases that were treated. Two embryos were transferred after fertilisation that resulted in successful implantation of both embryos. The pregnancy progressed and the lady gave birth to premature twins at 26 gestational weeks, weighing just 700 grams each. They were in the neonatal intensive care unit (NICU) for two months and were discharged in the pink of health.

Dr Manju B Nair

Clinical Director - Fertility, OAR, Cloudnine Fertility, Bengaluru

With over 18 years of experience, she is extremely skilful in handling patients with recurring IVF failures, multiple pregnancy loss, infertility due to polycystic ovary syndrome (PCOS), male infertility and patients with poor ovarian reserve or poor responders.

Technology is reducing human error and improving staff efficiency

IMPACT OF DIGITISATION

"Digitisation promises a revolutionary change in the field of medicine, including IVF clinics. We at Indira, IVF have embraced the technology and are equipped with technology like electronic witnessing system, IoT enabled 24X7 alarm and monitoring system, etc. We are testing various AI platform to integrate them into our system for objective outcomes, QMS programmes and increasing staff efficiency to deliver consistent results. Despite the challenges, it is undeniable that digitisation is well placed to improve and enhance IVF outcomes."

Nitiz Murdia

Co-Founder & Lab Director, Indira IVF Hospitals, Udaipur

His focus & efforts have always been to provide case specific customised treatment as per programmed protocols in an absolute transparent manner. His expertise in organisational strategy and planning, leadership, and governance, change management and organisational transformation has made Indira IVF one of the most sought-after infertility specialty chains in the country.

UNIQUE CLINICAL CASE

An Australian couple with five IVF failures came for treatment. The couple were young, decided to go for blastocyst with laser assisted hatching in first frozen embryo transfer cycle. Overall had two good grade blastocysts for first FET and an additional three for vitrification. A high βHCG value was obtained and then subsequently a gestational sac. It turned out to be missed abortion and the hard work was wiped out. Patient underwent PRP cycle to increase the chances of conception. From clinical side some immune modulation was prescribed during HRT treatment cycle. Previous three vitrified blastocysts were subjected to biopsy due to missed abortion in previous cycle. Obtained one euploid embryo out of three for single embryo transfer. The transfer was initiated using embryo glue to enhance the success. Patient now has a healthy live baby in her hands.

ET Healthworld.com

FERTILITY CONCLAVE

Co-Creating Futuristic Manifesto for Fertility Care in India

Powered By

BSV bringing life to life

CO-CREATING FUTURE MANIFESTO FOR FERTILITY CARE IN INDIA

The ET Healthworld Fertility Conclave powered by Bharat Serums and Vaccines Ltd has been conceived with the vision of establishing the potential of in-vitro fertilisation (IVF) in India and the global impact that it can create in the near future. Infertility has been on the rise globally, leading to a lot of couples who are wanting to be parents distressed and disappointed. Infertility is becoming a new epidemic, the intent towards the new regulatory requirements and digital advancements is now becoming the core focus of the segment and thereby paving the way for IVF to bloom in India. IVF treatments have brought hope and happiness back into the lives of people.

Reports are also indicative that India is witnessing a high burden of infertility. An estimated 30 million couples of reproductive age suffer from lifetime infertility. Out of the 30 million, only one per cent of the couples seek IVF intervention. The remaining do not seek treatment from lack of awareness, accessibility, costs involved apprehensions etc. Gynaecologists and IVF experts have not only helped people achieve parenthood but also helped them fulfil their dreams of a child that would have otherwise been impossible.

The second edition of ETHealthworld Fertility Conclave held discussions on the new policy ART Act and Surrogacy Act and how it will transform fertility treatment going forward. Moving ahead technology is going to play a crucial role in improving clinical outcomes and improving efficiencies across the board. During various discussions during the conclave, there were deliberations on the impact of technology and how it is becoming a game-changer in all aspects of life including fertility treatment. The issues and challenges surrounding IVF need to be taken seriously, and the conclave's intentions was to facilitate a dialogue amongst all key stakeholders involved to address the challenges and issues that are dampening the growth of the Indian IVF sector.

ET Healthworld was proud to feature and honour some of the most prominent names in the fertility sector with our National Fertility Awards 2022. The fertility sector has been working to help couples achieve their dreams of parenthood and as a service to humanity. The future of IVF in the country seems bright with tremendous potential.

TEAM

ET Healthworld.com

Editorial Team

Prathiba Raju
Prabhat Prakash
Aarushi Batra
Kivi Lydia Vito

Product Team

Manvi Saxena
Prachi Shukla

Marketing & Alliances

Ashivij Shetty
Saurav Prakash

Design

Amit Kumar
Nitin Gupta