

Prof (Col) Pankaj Talwar MD, VSM

MBBS, MD (OBG)
Director, Medical Services - Birla Fertility & IVF
Director, Birla Institute of Fertility Sciences

DOB: 22nd March 1966
MBBS: 1985-1989, AFMC Pune
MD (OBG): 1995-1999, AFMC Pune



Prof (Col) Pankaj Talwar VSM is a renowned fertility specialist in India and is currently Director, Medical Services at Birla Fertility & IVF and Director at Birla Institute for Fertility Sciences, Gurugram, Haryana, India. He has performed over 15,000 in vitro fertilization (IVF) cycles with a persistent 60% + clinical pregnancy rate over the past three decades. He is the recipient of the prestigious Vishisht Seva Medal, awarded by the President of India for his work in the field of assisted reproductive technology (ART) and fertility medicine. He has set up 18 IVF units in India and abroad. He is an expert in treating patients with recurrent IVF failures or implantation failures, andrology, sperm function test, ovarian cortex freezing and clinical embryology as well as developing specialized treatment protocols for cancer patients in line with the oncology team. A master trainer who has trained 1100 students across 34 countries. He has more than 100 publications and has edited 10 books including the first video atlas in ART. He is the President Elect of Indian Fertility Society (IFS).



- Director Medical Services Birla Fertility and IVF
- Director, Birla Institute for Fertility Sciences
- President Elect Indian Fertility Society
- Founder CEO of i-Ceat India
- Founder of global ART virtual university.
- Founder Secretary Fertility Preservation Society of India
- Member Infertility committee FOGSI
- Awarded Vishisht Seva Medal by the President of India for working in the field of infertility.
- Conducted more than 50 live workshops in India and abroad
- Certified 1100 students in ART from 24 Countries.
- Commissioning Editor FSR
- More than 100 publications
- Experience of Setting up 18 ART centers.
- Experience of 14,000 OPU and ET cycles.
- Trained in Human Embryonic Stem Cell Derivation Israel
- Trained in Ovarian Cortex Freezing (Fertility Preservation) Paris
- Trained in PGD Germany, Spain
- Trained in QA/QC Spain
- Edited 9 books
- 29 Years of Experience in Fertility and IVF

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Prof (Col) Pankaj Talwar MD, VSM is an alumnus of the prestigious Armed Forces Medical College, Pune, India. He was formerly the Director and Head of Obstetrics and Gynecology and IVF services at Army Hospital (Research and Referral), New Delhi.



Prof Pankaj Talwar is a gynecologist by profession and has been working in the field of Infertility and Clinical Embryology since the past 13 years. He has raised 4 IVF centres for Armed Forces in India and is consultant for multiple centers in India and abroad. He is the Director of Birla Fertility & IVF. The President of India has awarded him with military medal for his extensive work in the field of infertility.



He has conducted dozens of workshops in India and abroad in the field of Vitrification and Micromanipulation. He is credited with conducting **First live hands on workshop on Sperm Function Test, Time-Lapse Imaging and Ovarian Cortex Vitrification in India**. His special interests are PGD and Fertility preservation in cancer patients.



He is on the editorial board of multiple infertility journals and has edited multiple books on infertility which are available globally. He is also the Editor - in - Chief of the 1st video Atlas of ART in the world. His book Frozen Life was one of the 1st books in the world, dedicated to Human Cryobiology and is going in 2nd edition in coming year. Prof (Col) Pankaj Talwar is Founder secretary of Fertility Preservation Society of India and Indian Fertility Society.



He is the former director & CEO of ARTech which has three subsidiaries - i consult, i Homa and i Ceat which provide complete solutions to IVF units from initiation to commission.

Training in ART Sub Specialty

- Basic ART Training: ART centre, Army Hospital (Research and Referral) New Delhi.
- Clinical Embryology, Medicult Fertility School, Copenhagen in 2006 under Dr Mette Munk (course held in Mumbai).
- Vitrification Technology at Krishna IVF Centre with Dr Rama Raju at Vizag 2007.
- Regenerative Medicine: Derivation of neuronal stem cells from embryonic stem cells at National Brain Research Centre, Manesar 2007.
- Human Embryonic Stem Cell Derivation under Prof Joseph Istokovitz Haifa Israel in 2007.
- Ovarian Cortex Freezing (Fertility Preservation) under Prof Catherine Poroit, Publique Hospitale, Paris, France in 2009.
- Advanced Embryology under Prof James Catt of Monash University, 2011. (Course held in Mumbai).
- PGD and Advanced Embryology under Prof Markus Montag at Hiedelberg, Germany in 2012.
- QA and QC, Embryo Biopsy and Culture Techniques under Dr Gloria Claudron, Embryo tools, Barcelona in 2015.

Strength

- Carried out nearly 15000 IVF cycles with persistent 40% plus clinical pregnancy rate.
- Extensive experience in Advanced Clinical Embryology, Micromanipulation, Genetic screening, Stem cell biology and Cryobiology.
- Pioneering work in India in Fertilty Preservation.
- Experience of raising 18 IVF centres in India and abroad.
- Extensive experience in male factor infertility (Testicular Biopsy- ICSI)/Sperm Function Test.

Experience in Raising New ART Centres

Army Hospital (Research and Referral), New Delhi
INHS Asvini, Colaba, Mumbai
Military Hospital, Bhopal
Military Hospital, Guwahati
ESI Hospital, Basidarapur, New Delhi
Safdarjung Hospital, New Delhi
CMH, Dhaka, Bangladesh
Birla Fertility & IVF

Awards and Acolades

- 1. Vishisht Sewa Medal, Presidential award for work in the field of ART.
- 2. Received best paper award in "Medical Journal Armed Forces 2012" from DGAFMS for Paper titled -Does Catheter Choice During Embryo Transfer Alter the Pregnancy Rate?
- 3. Best Executive member of Indian Fertility society 2013-2015 during Annual meet of IFS in Dec 2015.
- 4. Received best Research Project award "Armed Forces Medical Research Committee"-2017 from DGAFMS, Indian Army.
- 5. Life Time Achievement Award 12th Nov 2017, LKO, Indian Fertility Society.
- 6. Annual Dr Prabha Mehra Oration at KGMU LKO, Fertility Preservtion, 11 Nov 2017.
- 7. Invited Guest Lecture, JSS, Jipmer (Pondichery), Fertility Preservation, 17 Mar 2017.
- 8. Delivered Oration of President Elect at IFS annual conference at Hyderabad 2022

Past Work Experience in Specialty and Appointments Held

- Served at ART centre Army Hospital (Research and Referral), New Delhi from 2005-2011.
- Head of the Department, ART Centre, Army Hospital (Research and Referral), New Delhi from 2009-2011.
- Head of the Department, ART Centre, INHS Asvini from 2011 2014.
- Head of the Department, ART Centre, Army Hospital (Research and Referral), New Delhi from July 2014
 Till 3rd March 2019.
- Head IVF Centre, Manipal Hospital, Dwarka, Delhi from March 2019 January 2020
- Director Birla Fertility & IVF and Director Birla Institute for Fertility Sciences to date

Administrative Appointments In Fertilty Societies

- Founder Secretary General of Fertility Preservation Society of India (FPSI).
- **Secretary General** of the Indian Fertility Society (IFS).
- Member Advisory committee of ICMR.
- Executive Committee member Infertility Committee (FOGSI).
- Executive Committee member Infertility Committee (AOGD).
- **Associate editor** of Fertility Journal of IFS.
- Faculty of the online embryology course being conducted by Indian Society of Assisted Reproduction (ISAR).
- Editor Nexus and Artext E bulletin of IFS.
- Faculty for European Society of Human Reproduction in Embryology Training Course.
- In-charge Exam cell Indian Fertility Society.
- Chief Examiner and coordinator of IFS fellowship exam clinical.
- Chief Coordinator and Incharge exam cell Indian Fertility Society embryology fellowship course

Research Work Undertaken

AFMRC Projects

Principle worker

- Primordial Follicle Isolation and In Vitro Maturation
- Comparison of sperm vitality in fresh semen with that in sample frozen intact with seminal plasma and after density gradient technique using glycerol cryoprotectant in fertile males of Indian Armed Forces.
- To study the embryonic HLAg as a marker of developmental potential in embryos.
- Large Collobrative project: Approved by DGAFMS in the Expert committee meeting by DGAFMS at AFMRC meet in 2015.

'To perform an euploidy screening for embryos using Pre-Implantation Genetic Screening Technology in highrisk cases with advanced maternal age, recurrent abortions and history of chromosomal numerical abnormality in the previous pregnancy.

Departmental Projects

- a. Study of human sperm motility post Cryopreservation.
- b. Surgical sperm retrieval and pregnancy outcome.
- c. Sperm function test in severly oligospermic semen samples.
- d. Sperm vitality correlation in pre-freeze and post thaw.
- e. Blastocyst transfer in ovarian Hyperstimulation cycles.
- f. Study of Sperm morphology of infertile males visiting the ART Centre.

Primary Membership of National Bodies

FOGSI (Federation of Obstetricians and Gynaecologists of India)

IFS (Indian Fertility Society)

ISAR (Indian Society of Assisted Reproduction)FPSI (Fertility Preservation Society of India)

ACE (Academy of Clinical Embryology)

Referee

MJAFI
AFMRC
IVF LITE: Journal of Infertility
Fertilty Science and Research

IVF Training In Armed Forces Medical Services

Trained **two Post Graduates in Anatomy, 8 service gynaecologists** in ART and embryology in the past 6 years. **Trained teams from CMH Dhaka, Bangladesh.**

Books Published

Sr No	Name of the Book /Monograph	Year of publication	Name of publisher with place
01	Frozen life: A Manual of Reproductive Biology and Stem cells. ISBN 978-81-8448-681-0 cell	2009	Jaypee publications
02	Manual of ART and Clinical Embryology ISBN 9789350255063	2011	Jaypee publications
03	Step by Step in ART ISBN 9769350257654	2012	Jaypee publications
04	Cytogenetics in Reproductive Biology ISBN -9789350909928	2014	Jaypee publications
05	A video atlas of Reproductive Biology and ART ISBN- 9789350907719	2014	Jaypee publications
06	IVF Techniques For The Beginners ISBN- 9789350903599	2013	Jaypee publications
07	Edited a handbook titled "Patient's Guide to Infertility Management": book released by Vice Admiral Shekhar Sinha, PVSM, AVSM, NM & BAR, ADC	22 nd July 2013	INHS Asvini publication
08	Nexus – Compendium of Embryology	2017	IFS publication

Chapters Contributed in Books

- 1. Pankaj Talwar, Step-by-step of Intra Uterine Insemination. Semen freezing. *Jaypee (India)*. 2008; 301-7. ISBN: 978-81-8448- 2008.
- **2. Pankaj Talwar**, Semen Banking. A Workbook on Human Spermatozoa and Assisted Conception by Sonia Malik. *Jaypee Publications (India)*. 2011. ISBN 97893502551.
- **3. Pankaj Talwar,** Update on Sperm Banking. Fertility Preservation: Emerging Technologies and Clinical Applications. *Humana Press (A division of Springer Science + Business Media)* and co-edited by Dr. Emre Seli. 2012. ISBN 9788132214366.
- **4. Pankaj Talwar,** Protocols in Sperm Preparation and Freezing. Fertility Preservation: Emerging Technologies and Clinical Applications. **Humana Press (A division of Springer Science + Business Media)** and co-edited by Dr. Emre Seli . 2012. ISBN 9788132214366.
- **5. Pankaj Talwar**, Semen Freezing and Use in Intra Uterine Insemination: Intra Uterine Insemination by RN Foundation. Edited by Gita Ganguly Mukherjee and BN Chakravarty. 2012; 130-140.
- **6. Pankaj Talwar,** Ved Prakash. Clinical Applications of Vitrification. Vitrification in Assisted Reproduction. *Springer publications*. 2014: 51-63.
- 7. Pankaj Talwar, Ashok K. Pillai, Falahunisa Shaikh. Role of Laparoscopic Ovarian Drilling in Polycystic Ovarian Syndrome and Its Effect on ART. Principles and Practice of Controlled Ovarian Stimulation in ART. Springer Publication. 2015; 347- 355.
- **8. Pankaj Talwar,** Puneet Rana Arora and Nalini Mahajan. Ovarian Stimulation Protocols in Fertility Preservation. Principles and Practice of Controlled Ovarian Stimulation in ART. *Springer Publication*. 2015; 369-374.
- **9. Pankaj Talwar.** Ovarian Tissue Vitrification. THE ART AND SCIENCE OF ASSISTED REPRODUCTIVE TECHNIQUES "J. Goral Gandhi. *Jaypee Brothers Medical Publishers (P) Ltd.*
- **10. Talwar Pankaj** & Singh, Sarabpreet. Human Epididymal and Testicular Sperm Cryopreservation. Methods in Molecular Biology. *Springer Publications* 2017; 1568: 85-104.
- **11. Talwar Pankaj** & Fauzdar Ashish. Assisted Conception Techniques: Which One to Choose. **Springer Publications** 2017; 265-293.
- 12. Talwar Pankaj & Ghosh, Pranay. Sperm Freezing Injuries. Springer Publications 2018; 205-226.
- **13. Pankaj Talwar** & Pooja Awasthi. Ovarian Cortex Cryopreservation: The Current Perspective. Principles and Practice of Assisted Reproductive Technology. 2018; 196- 206.
- **14. Pankaj Talwar** & Pooja Awasthi. Ovarian Tissue Freezing. Practical Guide in Andrology & Embryology. 2018; 336-358.
- 15. Pankaj Talwar & Pooja Awasthi. Ovarian Tissue Cryopreservation. Newer Trends in ART. 2018 (In Press).
- 16. Pankaj Talwar & Pooja Awasthi. Newer Media in Embryology Lab. Advances in IVF Lab. 2018 (In Press).
- **17. Pankaj Talwar** & Pooja Awasthi. Cryopreservation of Ovarian Tissue. Textbook of Assisted Reproduction. 2018 (*In Press*).
- 18. Pankaj Talwar and Sapna Yadav. Practical Clinical Aspects of Oocyte Vitrification for Elective Fertility Preservation. In Press
- 19. Pankaj Talwar and Sapna Yadav. Embryo Vitrification programme: Technique, device or embryo quality What matters? **In Press**
- 20. Pankaj Talwar and Sapna Yadav. Environmental Effect on Male Infertility. In Press

Journal publications in Concerned Specialty

- 1. Tanwar M, Sundararajan V, Shamsi MB, **Talwar P**, Sharma RK and Dada R. Infertility-Yq Micro-deletions and Implications in Assisted procreation. *Perspectives in Cytology and Genetics*. 2007; 13:273-287.
- 2. Shamsi MB, Sundararajan V, **Talwar P,** Sharma RK, Mukherjee S, Kumar R, Gupta NP and Dada R. Characterization of sperm chromatin quality by Comet Assay. *Perspectives in Cytology and Genetics*. 2007; 13: 255-262.
- 3. Sundararajan V, Kumar R, Shamsi MB, **Talwar P**, Sharma RK, and Dada R. Mitochondrial ATPase Gene Mutations Associated With Low Antioxidant Levels in Idiopathic Asthenozoospermic Indian Men. *Perspectives in Cytology and Genetics*. 2007; 13: 263-272.
- **4.** Talwar P. Fertility Preservation in Female Cancer Patients. *Journal of South Asian Federation of Obstet- rics and Gynecology (JSAFOG)*. 2009; 1(3):5-11.
- 5. Shamsi MB, Venkatesh S, **Talwar P,** Sharma RK, Dhawan A, Kumar R, Gupta NP, Malhotra N, Singh N, Mittal S, Dada R. DNA integrity and semen quality in men with low seminal antioxidant levels. *Mutat Res.* 2009; 665(1-2): 29-36.
- 6. Dr Venkatesh, Dr MB Shamsi, **Dr P Talwar**. Oxidative stress: Role of seminal plasma. *Obsts and Gynae*. 2009; 14(10).
- 7. Kumar R, Sunderajan V, **Talwar P**, Dada R. Oxidative Stress and sperm mitochondrial DNA mutation in Idiopathic oligoasthenozoospermic men. *Indian J Biochem Biophys*. 2009; 46:172-177.
- **8.** Talwar P. Overview of Cryobiology in ART. *Journal of South Asian Federation of Obstetrics and Gynecology (JSAFOG)*. 2010; 2(1): 11-17.
- 9. Surg Capt S Narayan, Col KS Rana, Col M Sharma, Col RK Sharma, Lt Col P Talwar Col K Kapur, Col BK Goyal. Profile of live born infants of In Vitro Fertilization. *MJAFI*. 2010; 66(1).
- 10. Beena Bhandari, **Pankaj Talwar**, Satish Gupta. Delineation of downstream signaling components during acrosome reaction mediated by heat solubilized human zona pellucida. *Reproductive Biology and Endocrinology.* 2010; 8:7.
- 11. Kumar Manoj , Pathak Dhananjay , Kriplani Alka , Ammini Ariachery , **Talwar Pankaj**, Dada, Rima. Nucleotide variations in mitochondrial DNA and supra-physiological ROS levels in cytogenetically normal cases of premature ovarian insufficiency. *Arch Gynecol Obstet*. 2010; 282:695-705.
- 12. B. Shamsi M , Sundararajan Venkatesh, **Talwar P** & Kumar R. 79 Effects of Antioxidants and ROS on Sperm DNA Integrity in Idiopathic Infertile Men. *Reprod Biomed Online*. 2010.
- 13. Sundararajan Venkatesh, Kumar Milind , Sharma A , Kriplani A, **Talwar P**, Agarwal Ashok , Dada Rima. Oxidative stress and ATPase 6 mutation is associated with primary ovarian insufficiency. *Archives of gyne-cology and obstetrics*. 2010; 282: 313-8.
- **14. Talwar P.** Semen banking and cryobiology. *International Journal of Infertility and Fetal Medicine*. 2011; 2(2): 51-60.
- 15. Talwar P, Sharma RK, Sandeep K, Sareen S, Duggal BS. Embryo reduction: our experience. Medical Journal Armed Forces India. 2011; 67(3): 241-4.
- 16. Lt Col Pankaj Talwar, Maj Nikita Naredi, Lt Col Sandeep K, Air Marshal GS Joneja, Col BS Duggal. Does catheter choice during embryo transfer alter the pregnancy rate? *MJAFI*. 2011; 67:311–314.
 (Received best paper award Medical journal Armed Forces 2012 From DGAFMS)
- 17. Sundararajan Venkatesh, Thilagavathi J, Kumar Kishlay, Deka D, **Talwar P**, Dada Rima. Cytogenetic, Y chromosome microdeletion, sperm chromatin and oxidative stress analysis in male partners of couples experiencing recurrent spontaneous abortions. *Archives of gynecology and obstetrics*. 2011; 284 (6):1577-84

- 18. Dada Rima, Mahfouz Reda, Kumar R, Sundararajan Venkatesh, B Shamsi, M, Agarwal Ashok, **Talwar P**, Sharma, Rameshwar. A comprehensive work up for an asthenozoospermic man with repeated intracytoplasmic sperm injection (ICSI) failure. *Andrologia*. 2011; 43. 368-72.
- 19. Wan-Xiang Xu, Beena Bhandari, Ya-Ping He, Hai-Ping Tang, Sanchita Chaudhary, **Pankaj Talwar**, Satish K. Gupta and Jian Wang. Mapping of Epitopes Relevant for Induction of Acrosome Reaction on Human Zona Pellucida Glycoprotein-4 Using Monoclonal Antibodies. *American Journal of Reproductive Immunology*. 2012; 68: 465–475.
- **20. Col Pankaj Talwar**, Pre Implantation Genetic Diagnosis: A Review. *Journal of Marine Medical Society*. 2012; 14.
- **21.** Col Pankaj Talwar, Human Embryonic Stem Cells- Role in Regenerative Medicine. *Journal of Marine Medical Society*. 2012; 14.
- **22. Pankaj Talwar**, K. Sandeep, Nikita Naredi, B.S. Duggal, Tony Jose et al. Systemic methotrexate: An effective alternative to surgery for management of unruptured ectopic pregnancy. *MJAFI*. 2013; 69 (2):130–133.
- 23. Oberoi Bhavni & **Talwar Pankaj**, Singh Munendra, Kumar Sushil. Preserving fertility in malignancy evolving trends. *Journal of Marine Medical Society*. 2013; 15(1):45-48.
- **24. Talwar Pankaj**, Oberoi Bhavni, Sen Ranabhim, Kumar Sushil. Male Infertility and Cytogenetics. *Journal of Marine Medical Society*. 2013; 15:49
- 25. Bilal Shamsi Monis ,Periyasamy Govindaraj ,Chawla Latika , Malhotra Neena , Singh Neeta , Mittal Suneeta , **Talwar Pankaj**,Thangaraj Kumarasamy ,Dada Rima. Mitochondrial DNA variations in ova and blastocyst: Implications in assisted reproduction. *Mitochondrion*. 2013; 13:96-105
- 26. Nikita Naredi, **Pankaj Talwar**, K. Sandeep .Ovarian hyper stimulation: VEGF antagonist for the prevention of ovarian hyperstimulationsyndrome. *Med J Armed Forces India*. 2014; 70(1):58-63. Epub 2012 Sep 11.
- 27. Malik S, Jain K, **Talwar P**, Prasad S, Dhorepatil B, Devi G, Khurana A, Bhatia V, Chandiok N, Kriplani A, Shah D, Sinha G, Unni J, Patil M, Singh M, Shah P, Chakraborty R, Bhattacharya S, Chatterjee S, Barik S, Vaidya R, Wangnoo SK, Mithal A, Ganie MA, Sinha B, Gopal J, Khadilkar W, Nagpal R, Khanna V K, Verma N, Zaheer A, Sthalekar B, Arya L, Khunger N, Sheth R, Bhatia D, Duggal V, Khadilkar A, Joshi B. Management of Polycystic Ovary Syndrome in India. *Fertil Sci Res.* 2014; 1:23-43.
- 28. Surg Lt Bhavni Oberoi, Surg Vice Adm Sushil Kumar, **Col Pankaj Talwar.** Study of human sperm motility post cryopreservation. *MJAFI*. 2014; 70: 349–353.
- 29. Nikita Naredi, **Pankaj Talwar**, Nagaraj Narayan, Seema Rai, Shakti Vardhan, Subrat Panda. Spontaneous conception following anti-tubercular treatment for sub-fertile women with multiple implantation failures. *Fertility Science and Research*. 2014; (1): 44-49.
- 30. Nikita Naredi, Nagaraj Narayana, **Pankaj Talwar**, Seema Rai. Embryo reduction in a myomatous uterus and polypectomy during embryo transfer: Challenges well overcome. *Fertility Science & Research*. 2014; 1: 109-111.
- 31. Seema Rai, Nagaraja Narayana, Prashant Sharma, **Pankaj Talwar**. IUI in hypogonadotropic hypogonadism: Do not give up. *Fertility Science & Research*. 2014; 1(2).
- 32. Malik Sonia ,Swami Onkar , Prasad Sudha , **Talwar Pankaj**, Verma Sohani , Jain Kuldeep , Nayar Kanad , Devi Gouri , Jindal Umesh . Clomiphene citrate usage pattern in India: A knowledge, attitude, and practice survey among gynecologists. *Fertil Sci Res*. 2014; 1(2):92-97.
- **33. Pankaj Talwar**, Suryakant Hayatnagarkar. Sperm function test. *Journal of Human Reproductive Sciences*. 2015; 8.
- **34. Pankaj Talwar**. Review on Azoospermia published in annual bulletin of *Academy of clinical embryologist*. 2015.

- 35. Malik Sonia, Sohani verma, Jain Kuldeep, **Talwar Pankaj**, Good clinical practice recommendations on management of infertility in patients from India with polycystic ovary syndrome. **Fertil Sci Res**. 2015; 2: 107-32.
- **36. Talwar Pankaj**. Fertility Preservation: Ovarian Tissue Cryopreservation (OTC) revisited. *Fertil Sci Res.* 2016; 3(1): 2-5.
- 37. Seema Rai, Nagaraja N, **Pankaj Talwar**, Prashant Sharma, Surender Mohan. Beta Human Chorionic Gonadotropin: A Prognostic Marker of In Vitro Fertilization Outcome. *International Journal of Recent Trends in Science and Technology*. 2016; 20(3): 328-332.
- 38. Nagaraja N, Seema Rai, **Pankaj Talwar**, Surender Mohan, Praveen Kumar, Prashant Sharma. Effect of Intra Uterine Instillation of Granulocyte Colony Stimulating Factor for Thin non-responding endometrium during IVF-ET: Non Randomized Comparative Study. *International Journal of Recent Trends in Science and Technology*. 2016; 20(3): 390-395.
- 39. Praveen Kumar, **Pankaj Talwar**, Surender Mohan. Laparoscopic Management of Heterotopic Pregnancy Post IVF ET: A Retrospective Analysis of Eight Rare Cases Operated by a Single Surgeon. *International Journal of Biomedical Research.* 2016; 7(11): 785-789.
- 40. Kumar Praveen , Mohan Surender, **Talwar Pankaj**, Rai Seema , Nagaraja N. Diagnostic Office Vaginohysteroscopy in Evaluation of Infertility Prior to IVF: A Retrospective Analysis of 1000 Cases. J Obstet Gynaecol India. 2017 Aug; 67(4): 275–281.
- 41. Talwar Pankaj, Yadav Sapna. Microfluidics in Andrology. Fertil Sci Res. 2017; 4(1): 8-14
- **42. Pankaj Talwar**, Sapna Yadav. Testicular dysfunction and cancer: The current status. *Onco Fertil J.* 2018; 1:17-23.
- 43. Nagaraja N, Talwar P, Mukherjee B, Chakrabarty BK. Correlation between Serum Progesterone Level on the Day of Ovulation Trigger During In vitro Fertilization and Its Effect on Treatment Outcome. J Hum Reprod Sci. 2019;12:136-40

Poster Presentations

- 1. Role of mitochondrial mutations in premature ovarian failure. International Conference of Reproductive Health and 20th Annual Meeting of the ISSRF. Feb 8-10, 2010 Jaipur. Manoj Kumar, Kishlay Kumar, Alka Kriplani, A. C. Ammini, **Pankaj Talwar** and Rima Dada.
- Affect of varicocelectomy on semen quality. International Conference of Reproductive Health and 20th Annual Meeting of the ISSRF. Feb 8-10, 2010 JaipurMonis Bilal Shamsi, Sunderanjan Venkatesh, Rajeev Kumar, Narmada Prasad Gupta, Suneeta Mittal, Neena Malhotra, Rakesh Kumar Sharma, Pankaj Talwar and Rima Dada.
- 3. Role of oxidative stress (OS) in premature ovarian failure (POF). International Conference of Reproductive Health and 20th Annual Meeting of the ISSRF. Feb 8-10, 2010 Jaipur S. Venakatesh, A. Sharma, A. Kriplani, A. C. Ammini, **Pankaj Talwar** and Rima Dada.
- 4. Fertility Preservation, Marine Medicine Congress, Mumbai 2013.

Live Workshops Conducted in the Related Field

1. FOGSI Conference 2008 New Delhi

Conducted a workshop on Reproductive Sonology and Vitrification along with Dr Lars Johnson and Dr Phillipe.

- **2. Vitrification Workshop under aegis Indian Fertility Society** at Army Hospital (Research and Referral), New Delhi .
- **3. Gynaecon 2009: Army Hospital (Research and Referral)** New Delhi conducted a workshop on Fertility Preservation.
- 4. Infertility conference at MAMC New Delhi 2010

Conducted a workshop on Advanced Embryology.

- 5. Indian Fertility Society: National workshop on ART 2011. Conducted a workshop on Ovarian Tissue Freezing.
- 6. Infertility conference at MAMC /AOGD, Delhi 2011 conducted a workshop on IUI and ART
- 7. Andrology workshop by Dr Sonia Malik, New Delhi 2011. Semen banking made easy.
- **8. Live video workshop on PGD and Ultrasound RCOG**. The Assisted Conception Course Joint RCOG / BFS (British Fertility Society) 2010, Video lecture on Semen Banking, Indraprastha Apollo Hospitals New Delhi.
- Chief Organiser of Vitrification and Advanced Embryology workshop held in Aug 2014 at New Delhi by Indian Fertility Society and AOGD.
- **10. Chief Organiser** of Quality Control workshop held in November 2014 at New Delhi by Indian Fertility Society and AOGD.
- 11. Chief Organiser of Infertility Webinar for IFS which was conducted over 20 cities live in 6 sessions 2015.
- **12. Organising Secretary** of Ultrasound workshop 11th International Symposiums on 1st May 2015 at New Delhi at Army Hospital.
- **13. Organising Secretary** of Andrology workshop 1st National Symposium on 15 st May 2015 at New Delhi at Army Hospital.
- **14. Organising Secretary** of Fertility Preservation workshop held on 21th Sept 2015 at New Delhi at ACMS, conducted by IFS, ACE and FPSI
- 15. Organising Secretary of International workshop on Time Lapse Imaging conducted by IFS, ACE.
- **16. Organising Secretary** of Pathcon Semenology course 12 Dec 2015 held at New Delhi, by IFS.
- 17. Organising Secretary of Men's health Andrology workshop to held at Delhi in Feb 2016, by IFS.
- **18. Organising Secretary** of Advanced Andrology workshop held in Delhi in 2018.
- 19. Organising Secretary of Fertilty Preservation Navigator 8 FP workshops held in india in 2018, by IFS.
- **20.** Chief Cordinator of 6 basic and advanced courses being conducted quaterly in New Delhi by IFS.

Academic Contributions in Infertility Meetings

2009 & 2010				
Name of the National and International Conference, Seminar Symposium, Workshop etc. with Place	Date / Year	Whether attended as a chairman of the conference or a section of it	Title of the paper present / read	
Gynaecon 2009: Command Hospital, Lucknow	2009	Lecture	ART complications	
Indian Fertility Society (IFS) 2010	2010	Lecture	Semen Banking Freezing	
National conference on Endocrinology and Infertility 2010	2010	Lecture	In Vitro Maturation	
		2011		
Indian Society of Assisted Reproduction (ISAR) 2011	2011	Lecture	IUI in clinical practice Oocyte Freezing	
IFS 2011 New Delhi	2011	Lecture	Oocyte Banking Male Fertility Preservation Semen Banking	
Muzzafarnagar Infertility Society / ISAR 2011	2011	Lecture	Fertility Preservation	
ISAR 2011 (Agra)	2011	Lecture	IUI in clinical practice Oocyte Freezing	
IFS 2011 (New Delhi)	2011	Lecture	Oocyte Banking Male Fertility Preservation Semen Banking	
Muzzafarnagar Infertility Society / ISAR 2011	2011	Lecture	Fertility Preservation	
Infertility conference at MAMC / AOGD, New Delhi 2011	2011	Lecture	Ovarian Reserve	

Cup ART 2011, Delhi	2011	Debate	Surrogacy
IVF lite 2011, Goa	2011	Lecture	Vitrification of Embryos
ALFA meet on embryology 2011, Delhi	2011	Chaired the session	Advanced Embryology
4th National conference on Laparoscopy, ART by Dr PJ Paul: 2011	2011	Lecture	Fertility Preservation
Andrology workshop by Dr Sonia Malik, New Delhi 2011	2011	Debate	WHO 2010
Indian fertility society: National workshop on ART 2011	2011	Workshop	Conducted a workshop on Ovarian Tissue Freezing
Infertility conference at MAMC / AOGD, Delhi 2011	2011	Live workshop	Conducted a live workshop on IUI and ART
		2012	
FOGSI 2012 Varanasi	2012	2012 Lecture	Lecture on Cryobiology Conducted Quiz on ART Technologies Lecture on Lab Management
FOGSI 2012 Varanasi IMA (IFS) Meet, New Delhi 2012	2012		Conducted Quiz on ART Technologies
IMA (IFS) Meet,		Lecture	Conducted Quiz on ART Technologies Lecture on Lab Management Fertility Preservation in male Panel Discussion on IUI
IMA (IFS) Meet, New Delhi 2012 Birth IVF Centre Kolkata	2012	Lecture	Conducted Quiz on ART Technologies Lecture on Lab Management Fertility Preservation in male Panel Discussion on IUI Panel Discussion on PCOS

		2013	
FOGSI 2013, Mumbai	2013	Lecture	Lecture on Fertility Preservation Chaired keynote address session in ART in India ICMR guidelines Panel Discussion
Gynaecon Oct 2013, AFMC, Pune	2013	Lecture	Lecture on Vitrification of Embryos and Oocytes
Infertility Meet under aegis of IFS: Varanasi	2013	Lecture	Panel Discussion on Andrology Lecture on gamete banking
Indian Fertility Society Annual Meet	2013	Lecture	Lecture on Vitrification Lecture on Lab Management Lecture on Embryo Transfer Lecture on autologous mitochondrial transfer for ageing oocytes National faculty in ESHRE certified embryology Trg module Organizing secretary of the clinical Andrology workshop Lecture on donor sperm banking Lecture on sperm function tests and semen analysis Lecture on Ovarian tissue banking Chaired a free paper session
		2014	
IFS Antioxidant1 meet on 18 Feb 2014	2014	Panel Discussion	Conducted a Panel Discussion
IFS Antioxidant – 2 meet on 06 Mar 2014	2014	Panel Discussion	Conducted a Panel Discussion
AIIMS Infertility conference	25 Apr	Lecture	Presented a paper on Vitrification

International conference on endoscopy and Infertility, Pune	4 May	Lecture	Presented a paper on Fertility Preservation
IFS Conference Chandigarh	4 Jun	Lecture	Presented a paper on Vitrification
Conducted PCOS Consensus under aegis of IFS Mumbai	15 Jun	Panel Discussion	Moderator of the Consensus
Conducted a Panel Discussion on Fertility Preservation under Aegis, FPSI India	11 July	Panel Discussion	Moderator of the Consensus
Embryology Workshop on Vitirfication and Time Lapse Technology, New Delhi	13 Aug	Lecture	Vitrification, Organising Secretary
National Infertility meet ESIC Hospital, New Delhi	28 Jul	Lecture	Fertility Preservation
Woops Jaipur 2014, Jaipur	8 Aug	Lecture	Ovarian Cortex Freezing
ACE 2014 Indore	9 Aug	Lecture	Setting up an Cryobiology Lab
ACE 2014 Indore	9 Aug	Lecture	IT In ART
Fertility Preservation Society of India 2014, New Delhi	7 Sep	Panel Discussion	Moderator of the Panel
Fertility Preservation Society of India 2014	8 Sep	Organizing Secretary	Vitrification of Ovarian Cortex
National Semenology Meet 2014, Pune	9 Sep	Lecture	Semen Analysis
National Semenology Meet 2014, Pune	9 Sep	Lecture	Semen Freezing
IFS Workshop, Dehradun 2014	9 Oct	Lecture Live Demonstration	Antioxidants in IUI IUI sample preparation

		2015	
		ESHRE Embryol- ogy Workshop	Spermatogenesis
		Lecture	Ovarian Cortex Freezing
		Conducted a Panel Discussion	Oocyte Banking
IFS Annual Meeting, 2015 Pune	24 Dec	Conducted Fellowship Exam	Conducted Entrance Examination
		Live Demonstration	Ovarian Cortex Freezing Oocyte Vitrification
		Free paper Session	Conducted 3 Sessions
		Poster Presentation	Judge
	8 Feb	Lecture	Ovarian Cortex Vitrification
ART Update AIIMS		Live demonstration	Chief Coordinator, Vitrification of Oocytes, Sperms and Embryos
Workshop on QA QC Army Hospital, New Delhi	21 Nov	Lecture & Video Demonstration	QA QC
IFS Connect, IFS New Delhi	16 Nov	Lecture & Video Demonstration	Vitrification Tips and Tricks
IMA, Annual Meet Ashok hotel New Delhi	10 Jan	Lecture	XY Chromosome and Fertility
Fogsi, National Meet Chennai	21 Jan	Panel Discussion Debate	Session on Fertility Preservation Debate on "Freeze for All"

National Conference on ART, Kanpur	1 Feb	Lecture	Role of Ultrasound in Radiology
MAMC IUI Conference, Delhi	14 Feb	Lecture	Complications of IUI
MAMC IUI Conference New Delhi	14 Feb	Workshop	Semen preparation for IUI
Indian PCOS Guidelines Meet	10 Mar	Consensus Meet	Conducted Key Pad Round
Indian PCOS Guidelines Meet	10 Mar	Consensus Meet	Panel Discussion
Webinar, New Delhi	21 Mar	Lecture	Fertility Preservation
National Update, Udaipur	22 Mar	Lecture	Prerequisites for ART Ultrasound in ART
Ferticon New Delhi	2015	Lecture	Moving from Gynecology to ART
MSR 2015, Aurangabad	29 Mar	Lecture	Fertility Preservation
IFS Webinar Series	6 Jan 21 Jan 6 Feb 21 Feb 21Mar	Conducted across 23 cities Moderator and Chief Organizer	Male Infertility Female Infertility Recent Advances
IFS Webinar Series New Delhi	21 Mar	Conducted across 23 cities	Talk On Fertility Preservation
Infertility Update Udaipur	22 Mar	Lecture	Ultrasound in ART Gynecology to ART
SFT Standardization Workshop Army Hospital (Research and Referral)	12 Apr	Live Demonstration	Sperm Function Test
Plant Cryobiology, PUSA Institute Delhi, ICAR	27 Apr	Lecture	Ovarian Cortex Freezing

ISUOG	1 May	Organizing Sec Lecture	Ultrasound Workshop
ISUOG	3 May	Chairperson Moderated a Panel Discussion	Ultrasound in Infertility Panel Reproductive Ultrasound
West Delhi Infertility Conference	26 Apr	Lecture	Ultrasound in IUI
Embryology Update LKO	10 May	Conducted a live workshop on Advanced Embryology	ICSI, Micromanipulation, Vitrification
IUI Work shop Udaipur	17 May	Lecture and Demonstration	IUI Protocols and Semen Preparation
Andrology Update	24 May	Organizing Sec	Hand on SFT Workshop
Society of Fetal Medicine	19 Jul	Lecture	PGS/PGD
Yuva FOGSI Jodhpur 2015	1 Aug	Panellist Lecture	Panel Discussion RIF
Trichy FOGSI	8 Aug	Moderator Lecture	Panel discussion on Infertility IUI
Chennai IFS	9 Aug	Lecture	PGS/PGD
FENIX AIIMS	16 Aug	Lecture	Fertility Preservation and Cryobiology
Infertility Meet AOGD, South Delhi	25 Sep	Chair Person Lecture	Fibroids in IVF Male Infertility
FPSI 2015	27 Sep	Organising Secretary Lecture	Male Infertility and Cancer Ovarian Cortex Freezing
FPSI 2015	28 Sep	Lecture	Cancer and Infertility
CME FPSI and Apollo Hospital, New Delhi	12 Sept	Moderator of Panel Discussion	Cancer - Case scenarios in Infertility

ACE Kochi	18-20 Sept	Moderator of Panel Discussion Lecture	PGS/PGD Semen Banking
ISAR National Meet Kolkata	4Oct	Lecture	Fertility Preservation
HMC DOHA, Andrology meet	13-15 Nov	Live workshop Lectures	Oocyte Freezing Semen Analysis and IUI PGS/PGD Rare Sperm Freezing Embryo Transfer Stimulation Protocols in ART
FOGSI Allahabad	16 Nov	Lecture Live Workshop	Male Infertility Semen Analysis and IUI
FOGSI Gorakhpur	17 Nov	Lecture Live Workshop	Male Infertility Semen Analysis and IUI
FOGSI Gangtok	27 Nov	Organising Sec Lecture	IUI Workshop and Andrology Fertility Preservation
IFS Siliguri	28 Nov	Organising Sec	Infertility Meet
	4-6 Dec	Workshop Lecture	Vitrification
		Lecture	Ovarian Cortex Feezing
IFS National Meet 2015		Chief Examiner	IFS Fellowship Entrance and Exit Exam
		In Charge Souvenir Committee	Judge Free Paper Session
			Chairperson of Session on Male Infertility
Association of Practicing Pathogists of Delhi and IFS 2015	12 Dec	Live Workshop Organising Sec	Semen Analysis and Andrology
Krishna IVF centre, VIZAG	13 Dec	Lectures	Stem Cells in Male Infertility Ovarian Tissue Banking

IFS Consensus Meet on PCOS in Infertility	20 Dec	Moderator	Management of Infertility in Patients with Polycystic Ovary Syndrome from India
AOGD, Infertility and Reproductive Endocrinology Committee, Fortis Hospital Shalimar Bagh	24 Dec	Lecture	Male Infertility
		2016	
AOGD Oncology Commit- tee, Safdarjung Hospital	9 Jan	Lecture	Fertility Preservation in cancer
Smart OBG Mumbai, MOGS	15 Apr	Lecture	Egg and Ovarian Tissue
Infertility Update, Rohtak	15 May	Lecture	Male Infertility
Infertility Update, Rohtak	15 May	Panel discussion	Trouble Shooting in IUI
ISAR Crystal Academy	11 Jun	Lecture	Set up of an IUI Lab
ISAR Crystal Academy	11 Jun	Lecture	Semen Prepartion for IUI
ACE Jaipur	23 Aug	Workshop Cordinator	Andrology
ACE Jaipur	23Aug	Lecture	Ovarian Cortex Freezing
FPSI, Bangalore	27 Aug	Organising Secretary	Conference
FPSI, Bangalore	27 Aug	Moderator: Panel Discussion	Safety Issues during IVF for Oncofertility
Bangladesh, CMH Dhaka	20-23 June	Visiting Professor	Semen Enalysis, Embryology, Set up of an IUI /ART centre

Wadia Hospital Mumbai	13 Aug	Lectures	Fertility Preservation Ovarain Cortex Freezing
	25 Sept	Lecture	Adenomyosis
IFFS 2016	22 Sept	Workshop Lecture	Fertility Preservation
1173 2010	21 Sept	Work shop Organiser	PGS / PGD
	21Sept	Panel Discussion	QA QC of the laboratory
Fortis Shalimar bagh	21 Oct	Moderator/ Chair-Person	Male Infertilty Lecture
Goverenmemt Medical	22 O et	IUI workshop Convenor	Hands-on Workshop
College Amritsar	22 Oct	Lectures	Semen Preperation and setting up of an IUI Lab
Milan Banglore	3 Nov	Work shop Demonstartion	Ovarian Cortex Freezing
		Lecture	Fertility Preservation
UACME Webinar, New Delhi	9 Nov	Web Telecast	Male and Female Infertility
AOGD	11 Nov	Convener	Advance ART Pre conference Workshop AOGD
ESHRE Embryology Course	5-8 Nov	Lectures	Cryobiology Sperm Physiology
IFS Lucknow	9Dec	Convener	Innovations in ART
IFS Lucknow	9Dec	Convener 2017	
IFS Lucknow Low Cost IVF	9 Dec 11 Feb		

Mohali PCOS	5 Mar	Speaker	Ovulation Induction
Jipmer Update	16 Mar	Workshop Coordinator	Embryology and FP
Jipmer Update	17 Mar	JSS Guest Lecture	Fertility Preservation
UCMS Update	26 Mar	Speaker	How to Raise an IUI Unit
UCMS Update	26 Mar	Speaker	IUI Hands-On
Jaipur Fertility Update	9 July	Speaker	Semen Analysis
Jaipur fertility Update	9 July	Demonstrator	IUI Techniques
FPSI 2017	19 Aug	Speaker	FP in Male
FPSI 2017	19 Aug	Demonstrator	OTC
ACE Hydrabad	15-17 Sept	Moderator	Vitrification
ACE Hydrabad	15-17 Sept	Speaker	Sperm Vitrification
Kanpur	10 Sept	Speaker	Fertility Preservation
Maulana I nfertility Update	29 Oct	Speaker	PGS/PGD
Ambala Infertility Update	2 April	Speaker	OTC
Ambala Infertility Update		Speaker	OI in Hyper Responder
Kannur Infertilty Update	31 Oct		Fertility Preservation
Ajanta LKO	12 Nov	Speaker	Shift to ART
MAMC	12 Nov	Speaker	Setting up of an ART Unit
KGMU	11Nov	Oration	Fertility Preservation
AOGD 2017	17 Nov	Speaker	OTC

CIIM 2017	26 Nov	Speaker	PCOS and RIF
ESHRE Embryology	6 Dec	Speaker	Cryobiology
Fertivision 2017	8-10 Dec	Speaker	Oocyte Banking
Fertivision 2017	8-10 Dec	Demonstrator	Cryobiology workshop
Ahmedabad ISAR	16-17 Dec	Speaker	Raising a FP Unit
		2018	
4 G Andrology, Delhi	21 Jan	Convener and Speaker	Microfluidics in ART
4 G Andrology, Delhi	21 Jan	Speaker	Microfluidics Hands-on
ISAR Bhopal	27 Jan	Speaker	PCOS
ISAR Bhopal	27 Jan	Speaker	Why an Excellent Embryo Does Not Implant
ISAR Bhopal	27 Jan	Moderator	Vitrification
FOGSI Bubneshwar		Speaker	OHSS
FP Navigator LKO	25 Feb	Moderator	FP Panel Discussion
FP Navigator Ahmedabad	11 Feb	Moderator	FP Panel Discussion
Communican Dalle			
Communicon, Delhi	25 Mar	Panelist	Medico Legal Issues
Pondicherry IFS	25 Mar 7 Apr	Panelist Speaker	Medico Legal Issues ICMR Guidelines
Pondicherry IFS	7 Apr	Speaker	ICMR Guidelines

Goa TOG conclave	26 May	Moderator	LPS
ACE Masterclasses	10 June	Speaker	Vitrification
UP Infertilty Update	21 June	Speaker	ICMR guidelines
Infertility Update, Trivan- drum	25 June	Speaker	Endometriosis
Uttarakhand IFS Update	15 July	Speaker	ICMR Guidelines
Haryana IFS Update	18 July	Speaker	Male Fertility
Yuva ISAR, Chennai	21 July	Moderator	RIF
Yuva ISAR, Chennai	21 July	Speaker	Sperm Vitrification
KISAR, Banglore	29 July	Speaker	Vitrification Trouble Shooting
KISAR, Banglore	29 July	Speaker	Fertility Preservation
ACE, Goa	19 Aug	Speaker	DNA Fragmentation
CME & Workshop on	15 Sep	Speaker	WHO Parameters of Semen Analysis
Infertility, Trichy	1	Speaker	Sperm Function Test (SFT) Why? Clinical Relevance
2 nd Congress of the ASFP & FERTIPROTECT, NewDelhi	22 Sep	Speaker	Current Role of the Ovarian Cortex Freezing in ART practice
Economic Times Conclave, New Delhi	26 Oct	Moderator	USG in Infertility
Wockardt, Chennai	19 Nov	Speaker	Male Infertility
IFS - Fertivision	14 Dec	Speaker	Chemical & Microbial Contamination in ART Lab
ITO - TETUVISIOII	14 Dec	Speaker	Technical Challenges: Take Home Message

		2019	
Poor Ovarian Reserve, Lucknow	30 Jan	Speaker	Poor Ovarian Reserve & Embryology
Recent trends in Infertility, MAMC, New Delhi	10 Feb	Speaker	Cryopreservation: Gamete & Embryos
Current Concepts in Infertility, Rewari	10 Feb	Speaker	Male Infertility
Motivational Talk, Wockardt, New Delhi	20 Feb	Speaker	Motivational Talk
Narchi Workshop, New Delhi	20 Feb	Speaker	Fertility Preservation
Annual Meet UP West,	24 Feb	Speaker	Male Infertility
Bareilly	24 Feb	Moderator	Ethics in ART
Economic Times Conclave, Mumbai	7 Mar	Moderator	Panel Discussion on Ethics in Infertility
Cancer & Fertility Preservation, Nagpur	10 Mar	Moderator	Fertility Preservation "Facts & Dilemma"
Endometriosis & Male Infertility, Karnal	31 Mar	Moderator	Male Infertility: Case Discussion
Conference on Communicon in Healthcare	7 Apr	Chairperson	
An Update in Gynecological Malignancies (Amalgamating Basics and Evidence), New Delhi	13 Apr	Panelist	Management of Oncofertility in Young Girls: The changing rules
Basic Essentials for Fertility,	14.4	Speaker	Male Factor Infertility
Rishikesh	14 Apr	Moderator	Ethics in ART

Current Concepts in Infertility, Chandigarh 21 Apr Moderator Moderator Healthy Pregnancy Workshop, New Delhi Annual CME IFS-UP 27 Apr Speaker Speaker Luteal Phase Support Role of Ultrasound in Female Infertility Annual CME-Punjab Chapter, Jalandhar 28 Apr Speaker Ultrasound in Female Infertility Annual CME-Punjab Chapter, Jalandhar Gynae Forum, Rajouri Garden, New Delhi Ulfursound in Female Infertility Moderator Dilemma in Fertility Management Speaker IUI: Video Presentation Hands on workshop on IUI Annual Meeting, Haryana Chapter Delhi Gynae Forum 30 May Chairperson ISAR-IFS-ACE: Embryology Consensus IMS Delhi 8 Jun Speaker Lab Consensus Newer Advances in Male Infertility Pertility Preservation Scenario-Are We There Yet Panelist Oligoasthenoteratospermia-Treat the man or treat the Sperm Ghaziabad Gynae Forum 19 Jun Speaker Fertility Preservation				
Healthy Pregnancy Workshop, New Delhi Annual CME IFS-UP 27 Apr Speaker Luteal Phase Support Role of Ultrasound in Female Infertility Annual CME Punjab Chapter, Jalandhar Gynae Forum, Rajouri Garden, New Delhi 4 May Moderator Dilemma in Fertility Management Speaker IUI: Video Presentation Hands on workshop on IUI Annual Moderator Moderator Moderator Hands on workshop on IUI Annual Meeting, Haryana Chapter 5 May Moderator Moderator Moderator Azoospermia: What Next? Delhi Gynae Forum 30 May Chairperson ISAR-IFS-ACE: Embryology Consensus IMS Delhi 8 Jun Speaker Fertility Preservation Scenario-Are We There Yet Panelist Oligoasthenoteratospermia-Treat the man or treat the Sperm	<u>-</u>	21 Apr	Speaker	·
Workshop, New Delhi 24 Apr Speaker Edited Phase support Annual CME IFS-UP 27 Apr Speaker Role of Ultrasound in Female Infertility Annual CME- Punjab Chapter, Jalandhar 28 Apr Speaker Ultrasound in Female Infertility Gynae Forum, Rajouri Garden, New Delhi 4 May Moderator Dilemma in Fertility Management IUI Workshop, Sofat Hospital, Ludhiana 5 May Moderator Hult: Video Presentation Annual Meeting, Haryana Chapter 5 May Moderator Azoospermia: What Next? Delhi Gynae Forum 30 May Chairperson ISAR-IFS-ACE: Embryology Consensus 1-2 Jun Group Leader Lab Consensus IMS Delhi 8 Jun Speaker Newer Advances in Male Infertility ART Conclave 2019 16 Jun Speaker HMG vs rFSH- Cost vs Benefit Panelist Oligoasthenoteratospermia-Treat the man or treat the Sperm	Infertility, Chandigarh	21 Api	Moderator	-
Annual CME FS-UP 27 Apr Speaker Infertility Annual CME- Punjab Chapter, Jalandhar 28 Apr Speaker Ultrasound in Female Infertility Gynae Forum, Rajouri Garden, New Delhi 1UI Workshop, Sofat Hospital, Ludhiana 5 May Moderator Speaker IUI: Video Presentation Moderator Hands on workshop on IUI Annual Meeting, Haryana Chapter 5 May Moderator Azoospermia: What Next? Delhi Gynae Forum 30 May Chairperson ISAR-IFS-ACE: Embryology Consensus IMS Delhi 8 Jun Speaker Newer Advances in Male Infertility Speaker Fertility Preservation Scenario-Are We There Yet Panelist Oligoasthenoteratospermia-Treat the man or treat the Sperm	, ,	24 Apr	Speaker	Luteal Phase Support
Chapter, Jalandhar Gynae Forum, Rajouri Garden, New Delhi IUI Workshop, Sofat Hospital, Ludhiana Speaker Speaker IUI: Video Presentation Hands on workshop on IUI Annual Meeting, Haryana Chapter Delhi Gynae Forum 30 May Chairperson ISAR-IFS-ACE: Embryology Consensus IMS Delhi 8 Jun Speaker Lab Consensus Newer Advances in Male Infertility ART Conclave 2019 16 Jun Speaker Panelist Oligoasthenoteratospermia-Treat the man or treat the Sperm	Annual CME IFS-UP	27 Apr	Speaker	
Garden, New Delhi IUI Workshop, Sofat Hospital, Ludhiana Speaker IUI: Video Presentation Moderator Hands on workshop on IUI Annual Meeting, Haryana Chapter 5 May Moderator Azoospermia: What Next? Delhi Gynae Forum 30 May Chairperson ISAR-IFS-ACE: Embryology Consensus 1-2 Jun Group Leader Lab Consensus IMS Delhi 8 Jun Speaker Newer Advances in Male Infertility Fertility Preservation Scenario-Are We There Yet ART Conclave 2019 16 Jun Speaker Panelist Oligoasthenoteratospermia-Treat the man or treat the Sperm	•	28 Apr	Speaker	Ultrasound in Female Infertility
Moderator	•	4 May	Moderator	·
Moderator Hands on workshop on IUI	IUI Workshop, Sofat		Speaker	IUI: Video Presentation
Haryana Chapter S May	-	5 May	Moderator	Hands on workshop on IUI
ISAR-IFS-ACE: Embryology Consensus 1-2 Jun Group Leader Lab Consensus IMS Delhi 8 Jun Speaker Newer Advances in Male Infertility Speaker Fertility Preservation Scenario-Are We There Yet ART Conclave 2019 16 Jun Speaker HMG vs rFSH- Cost vs Benefit Panelist Oligoasthenoteratospermia-Treat the man or treat the Sperm		5 May	Moderator	Azoospermia: What Next?
IMS Delhi 8 Jun Speaker Speaker Speaker Speaker Fertility Preservation Scenario-Are We There Yet ART Conclave 2019 16 Jun Speaker Panelist Oligoasthenoteratospermia-Treat the man or treat the Sperm	Delhi Gynae Forum	30 May	Chairperson	
IMS Delhi Speaker Speaker Fertility Preservation Scenario-Are We There Yet ART Conclave 2019 16 Jun Speaker HMG vs rFSH- Cost vs Benefit Oligoasthenoteratospermia-Treat the man or treat the Sperm		1-2 Jun	Group Leader	Lab Consensus
ART Conclave 2019 16 Jun Speaker Are We There Yet HMG vs rFSH- Cost vs Benefit Panelist Oligoasthenoteratospermia- Treat the man or treat the Sperm	IMS Delhi	8 Jun	Speaker	
Panelist Oligoasthenoteratospermia- Treat the man or treat the Sperm			Speaker	•
Treat the man or treat the Sperm	ART Conclave 2019	16 Jun	Speaker	HMG vs rFSH- Cost vs Benefit
Ghaziabad Gynae Forum 19 Jun Speaker Fertility Preservation			Panelist	_
	Ghaziabad Gynae Forum	19 Jun	Speaker	Fertility Preservation

ISAR-IFS-ACE: ART Consensus	25 - 26 Jun	Group Leader	Third Party Reproduction
East Delhi Gynae Forum	26 Jun	Speaker	Micronutrients in Male Infertility
ISAR Coval Infertility Meet, Coimbatore	30 Jun	Speaker	Male Infertility
South Delhi Gynae Forum	1 Jul	Speaker	Antioxidants in Male Infertility
Annual Conference of ACE, Chennai	20 Jul	Speaker	Single Sperm Freezing

2021				
Gurgaon Obstetrics and Gynaecological Society	21 Apr	Panel Discussion	Commandments of setting up an ART clinic	
NABHA Obstetrics and Gynaecological society, Patiala	26 Jun	Lecture	Luteal phase defect "An evidence based approach"	
Webinar	15 Jul	Lecture	Fertility Preservation in cancer patients- Update 2021	
Surat O and G Society - IFS Webinar	10 Sep	Lecture	How will you approach a case presenting with abnormal semen parameters	
Interactive Webinar - Birla Fertility and IVF group	11 Sep	Convenor Panel discussion	Tips and Tricks of raising an IVF unit	
Interactive Webinar - Birla Fertility and IVF group, Lucknow chapter	19 Sep	Convenor Panel discussion	Male infertility- current scenario	
IFS SIG - Fertility Preserva- tion Emerging trens	26 Sep	Panel Discussion	Fertility Preservation- Where we stand in 2021?	

Online academic session - Birla Fertility and IVF	26 Sep	Lecture	Semen analysis - Tips and Tricks
ACE 2021, Kolkata	1-3 Oct	Lecture	Workshop- Optimisation of vit- rification- advanced techniques
IFS SIG- Andrology	17 Oct	Lecture	Sperm preparation technique
AGOG	27 Oct	Lecture	Sperm selection in ART - What is new?
AOGD, New Delhi	30 Oct	Lecture	Diminished Ovarian reserve
43 rd Annual AOGD Conference, New Delhi	19-21 Nov	Lecture	Semen parameters "What is new in WHO manual 2021"
KOGS Webinar	25 Nov	Lecture	PCOS in Infertility- Way ahead and recent advance
Fertiprotect - 8 th Annual conference of FPS	28 Nov	Faculty	Sperm vitrification and outcomes compared to slow freeze
Gynecon 2021, AFMC Pune	11-12 Dec	Lecture	Past, Present and Future of IVF
GOGS Annual chapter - Infertility Workshop	18 Dec	Lecture	Semen analysis update from 2021 WHO manual

2022				
Fusion 2022 (ESHRE. IFS. ISAR)	4-6 Feb	Chairperson	Cancer and female Infertility- Cryo Preservation	
International Conference on Reproductive Healthcare & 32 nd Annual Meeting of the Indian Society for the Study of Reproduction and Fertility (ISSRF-2022)	11-13 Feb	Lecture		
Goa	23 Mar	Lecture	Role of Cetrolix and Leuprolide in IVF	

6 th Embryology National	25-27 Mar	Lecture	Evaluation of temperature, PH, Osmolarity, VOCs in the IVF Lab
ISAR Conference, Raipur		Panel Discussion	Optimising IVF results with current evidence
Birla Fertility and IVF, and AOGD	29 Mar	Convenor	Endomitriosis
ISAR Odisha CME, Cuttack	30 Mar	Lecture	Male factor in fertility management - The neglected chapter
IFS Haryana chapter	31 Mar	Lecture	ART Rules and Regulations
AICOG Indore	4 - 8 Apr	Lecture	Ovulation induction Simplified approach to COH in normal reproduction
IFS Conference, Mohbtabad (Haryana)	20-21 Aug	Expert	Management of Poor ovarian response
Fertility unscripted- Birla Fertility and IVF, New Delhi	22 Apr - 23 Aug	Convenor	PCOS in infertility IUI and beyond
IFS Odisha Chapter, Bhubh- neshwar	25 May	Lecture	ICSI in Teratozoo Spermia
Oman CME Webinar	8 Jun	Lecture	Ovulation induction unscripted
GOGS	12 Jun	Lecture	Past, present and future of infertility
Agra Obstetrics and Gynae- cological Society, Agra	12 Jun	Lecture	Past, present and future of infer- tility
ESHRE 38 th Annual meeting, Milan (Italy)	3-6 Jul	Chairperson	Fibroids and Fertility
IFS Punjab Annual Conference	17 Jul	Faculty	IUI in 2022

IFS Chattisgarh chapter	3 Jul	Lecture	Updated Surrogacy Bill 2022
IFS Lucknow chapter	4 Jul	Lecture	IUI
IFS Haryana chapter- 2nd Annual conference, Gurgaon	10-11 Sep	Lecture	Newer advances in male infertility
IFS Rajasthan chapter, Jaipur	1 Oct	Lecture	Effect of millenium lifestyle on sperm parameters and male infertility
		Panel Discussion	POI Is environment responsible?
10 th IFS ESHRE Course Scientific Program	Weekly from 30 Oct - 27 Nov	Lecture	Developmental Biology, Embryonic Stem cells The Foetal Ovary, The Foetal Testes
3 rd Annual Conference IFS, Raipur	6 Nov	Lecture	Sperm Function test, Stimulation Protocols and management of poor responders, Semen analysis to preparation
44 th Annual AOGD Conference, New Delhi	12-13 Nov	Lecture	Setting up of IUI Lab an prerequisites as per new ART Law
IFS Madhya Pradesh CME on Infertility and Fellowship award ceremony, Bhopal	27 Nov	Panel discussion	How to move from IUI practice to IVF practice?
MOGS Muradabad	7 Dec	Lecture	Optimising ovulation induction and its management
FERTIVISION 2022	9-11 Dec	Lecture	Bell jar to cloud- Beginning of the end

		2023	
65th All India Congress of Obstetrics and Gynaecology	6 Jan	Lecture	Industry session on ovulation induction

E - Bulletins Editor in chief (IFS)

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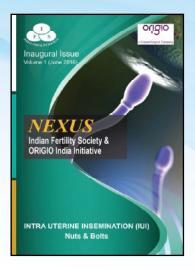
Nexus (Clincal Embryology)

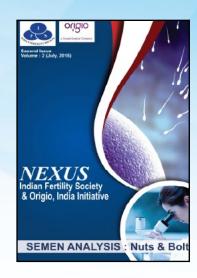
- 1. IUI
- 2. Semen Analysis
- 3. Sperm Function Test
- 4. Semen Freezing
- 5. Ideal Culture Media
- 6. Vitrification
- 7. ICSI Nuances
- 8. Ovum Pick Up
- 9. Embryo Transfer
- 10. Artificial Oocyte Activation
- 11. Embryo Grading

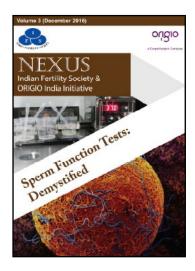
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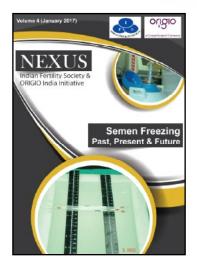
- 1. Hydrosalpinx in ART
- 2. Endometriosis and Infertility
- 3. Poor Ovarian Responders
- 4. Adenomyosis
- 5. Thin Endometrium in ART
- 6. Fibroids and Infertility
- 7. GonadoTrophins in ART
- 8. Endometrial Receptivity Array (ERA)

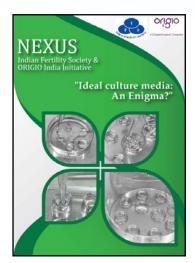
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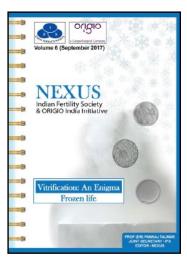


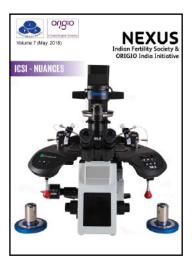


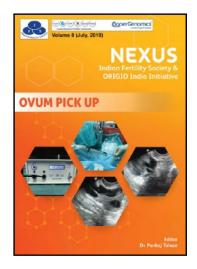


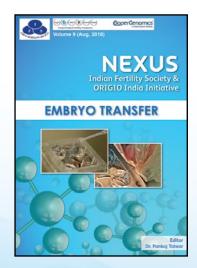


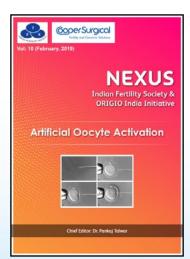


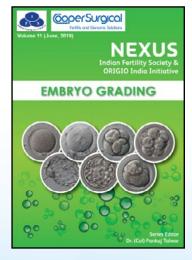




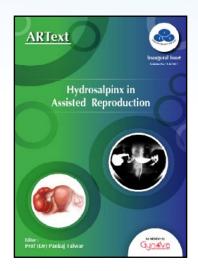


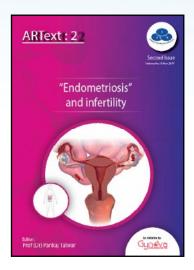


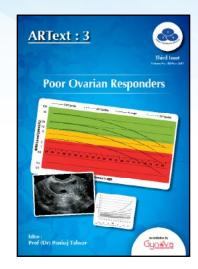


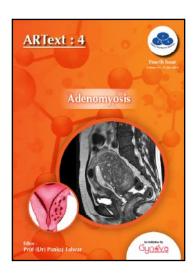


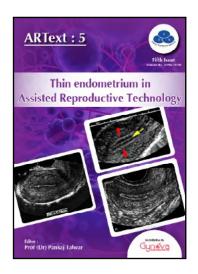
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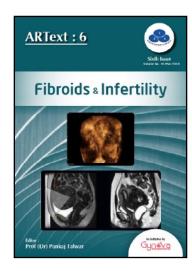


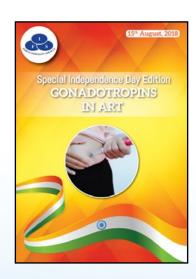


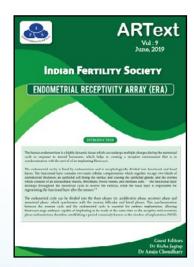




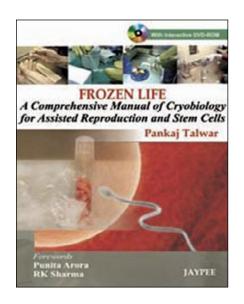


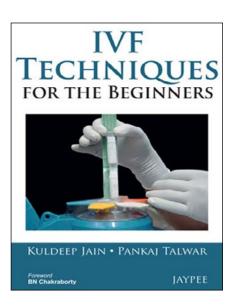


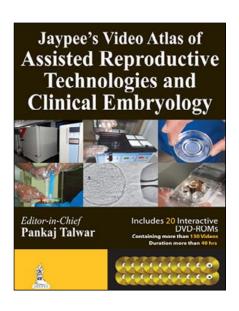


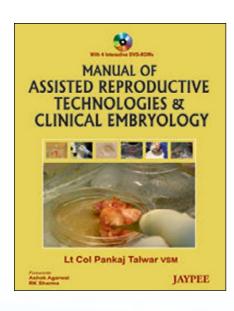


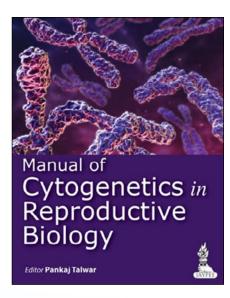
Published Books

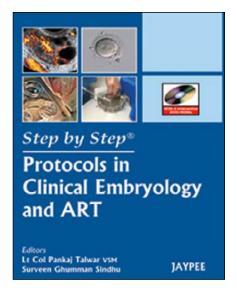






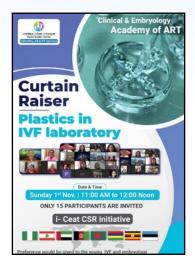






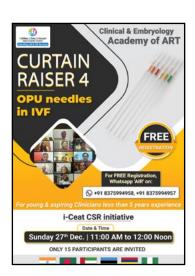
Curtain Raisers 1-38





















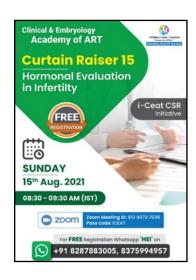


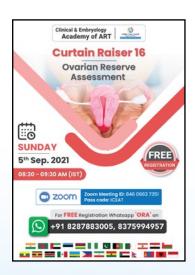


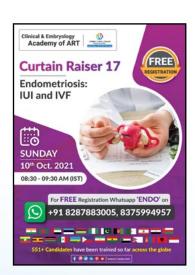






















































Hybrid Courses







Weekend Special Courses







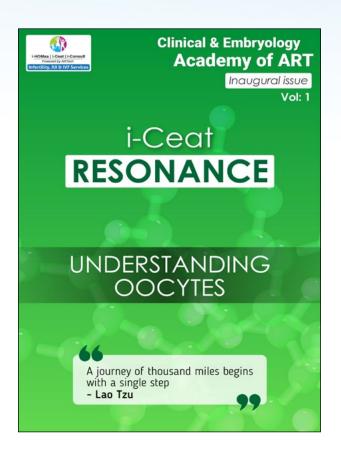


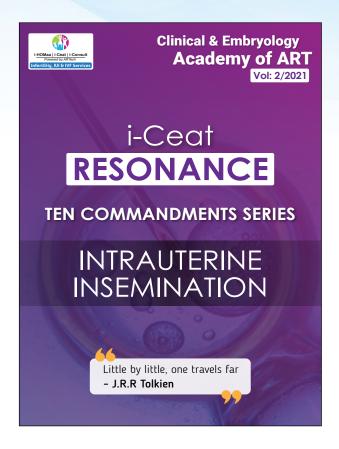


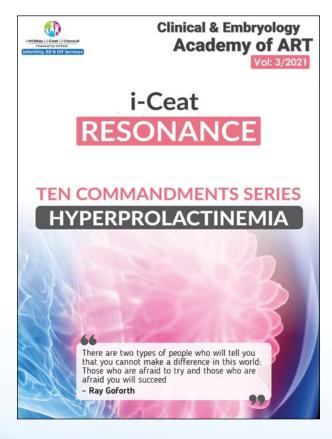


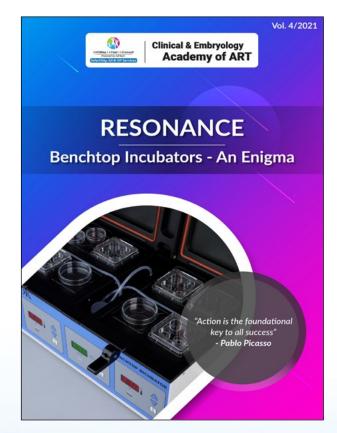


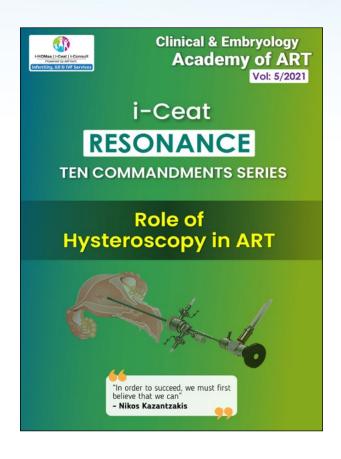
Resonance

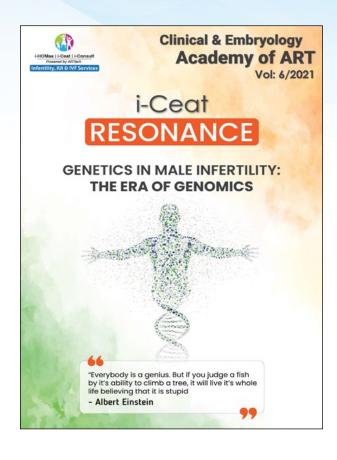


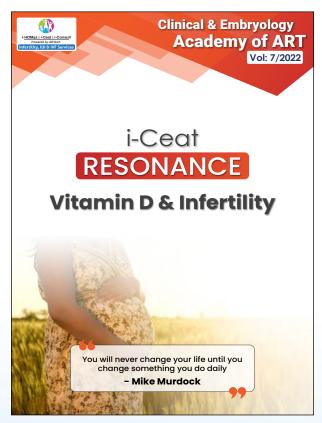


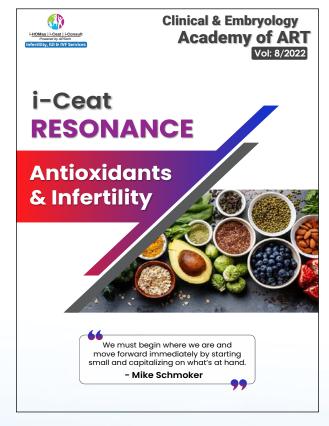


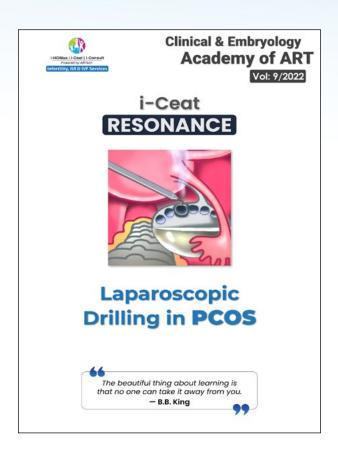


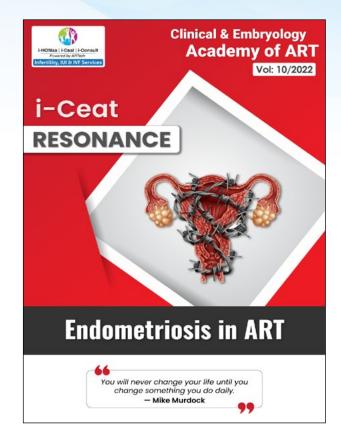


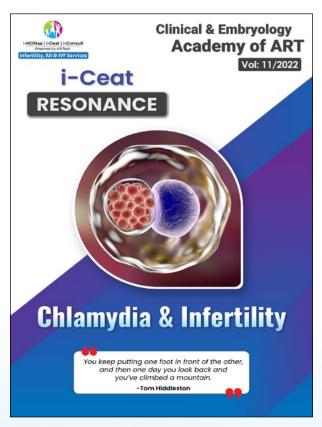




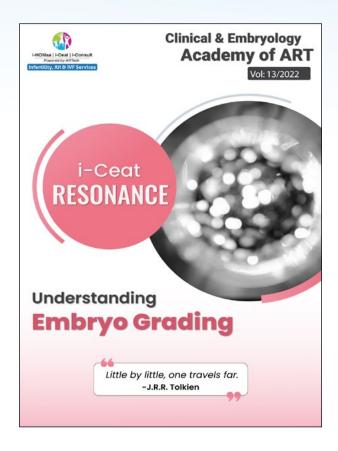












Ultrasound Series









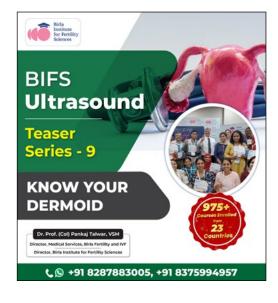




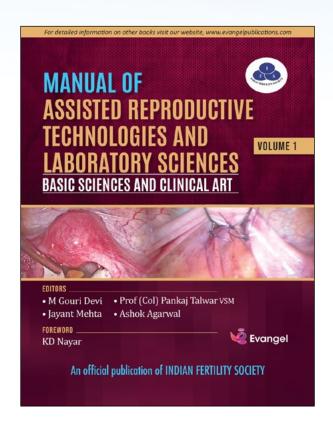


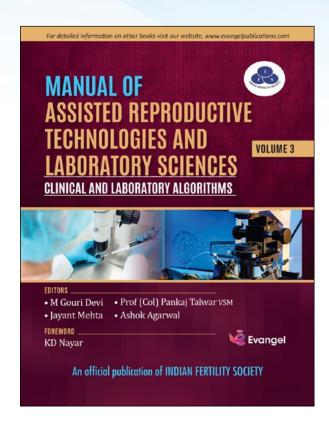


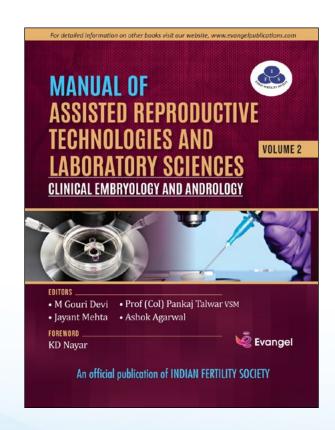


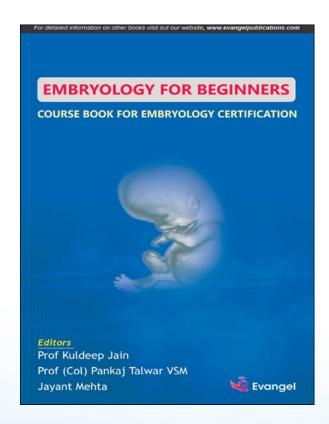


New Books Launched in 2022-23









Motto of E4

EXEMPLARY CARE, ETHICS, EDUCATION AND EMPATHY

- 1. Providing academic support to young clinicians and embryologist of the India and abroad.
- 2. Encourage one to one interactions and raise the levels of core competence.
- 3. Organizing short training capsules for your teams to learn the basics of the infertility.
- 4. It would be ensured that each participant gets ample hands-on experience with the requisite and instructive theory lectures.
- 5. Specially designed course materials for catering to your entire requirement from IUI to IVF.
- 6. Simulator based and hands on Training in Embryology and Endoscopy.
- 7. Teach ethical and clean practice points, which are legally acceptable as per the existing guidelines.
- 8. The unique one-on-one training makes the courses flexible in the course content and the timing to meet your specific needs.
- 9. Hands on sessions would be preceded by an exhaustive theory discussions relating to the clinical ART procedures, operational issues and maintenance of laboratory equipment's.
- 10. Prime Focus would be on developing your clinical and laboratory skills, enhancing your efficiency swiftness and mold you into an ideal reproductive clinician and embryologist.
- 11. Empower you by strengthening your ART practice.
- 12. Helping you to remodel existing facility or develop new clinical setups and laboratories as per the ICMR guidelines.
- 13. Offer the facility of Clinical and embryology teams to assist and teach you daily practice points whenever required.
- 14. Impart your team instructive, practical and technical support during the live procedures.
- 15. Teach ethical and clean practice points, which are legally acceptable as per the existing guidelines.
- 16. Hands on training on all aspects of embryology and clinical reproductive medicine whenever needed.
- 17. Helping you to establish and IUI or ART clinic from Inception to conception.
- 18. Would guide you in siting of the clinic and laboratory; develop ergonomic infrastructure, Procurement of equipment and troubleshooting.
- 19. Laboratory calibration services and ART clinics QA QC

