Dr. Ashutosh Halder

Professor & Head
Department of Reproductive Biology

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Dr. Ashutosh Halder
Professor & Head
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MBBS (Cal), MD (OG, AIIMS), DNB (OG),
DM (Med Genet, SGPGI), FAMS, FRE, FIABS
Commonwealth Scholar (Fetal Medicine)
(Ex Asst. Prof., Med Genet, SGPGIMS, Lucknow)

Specialization

Reproductive Genetics
Reproductive Endocrinology
Reproductive toxicology
Reproductive Biology & Clinical Embryology
Teratology
Molecular Cytogenetics

Citations: near 1300+ (composite)
Google Scholar (1287)/Research Gate (990)

h-index	19
i10-index	35

Training

Obstetrics & Gynecology (AIIMS/MD+SR)
Medical Genetics (SGPGIMS/DM)
Fetal Medicine (Fetal Medicine Unit, Dept of Obst & Gyne, UCL, London)
Molecular Cytogenetics
(Galton Laboratory & Hamilton Laboratory, UCL, London;
Human Genetics, Virchow Klinicum, Berlin;
Cytogenetics, University of Clermont Ferrand, France;
Human Genetics, University of Bari, Uniba Biologia, Italy)

Teaching Courses Guided

MSc in Reproductive Biology & Clinical Embryology (AIIMS; since 2016)
PhD in Reproductive Biology (AIIMS; since 2001)
DM in Med Genet (SGPGI; between 1997-2001)

Training Provided

Long Term: Molecular Cytogenetics, Clinical Embryology, Reproductive Endocrinology, etc
National Workshop: One-Week Workshop on Molecular Cytogenetics as Annual Event

Clinical/Laboratory Services Provided

Andrology (Primary Testicular failure), Malformation, Infertility, Reproductive Endocrine Disorders (PCOS, Hyperprolactinemia, POF, Primary Amenorrhoea, hypogonadotropic/ hypergonadotropic hypogonadism, etc)
Molecular Cytogenetics (FISH, microarray, etc)
Working on semen banking

Consultation/Research Areas

1. Polycystic ovary disease
2. Premature ovarian failure
3. Hyperprolactinemia
4. Testicular maturation arrest
5. Sertoli cell only syndrome
6. Spermiation defect
7. Microdeletion syndrome
8. Recurrent Pregnancy Failure
9. Recurrent Malformations
10. Disorder of sex development
11. Endometriosis
12. Familial Reproductive Cancers
13. Biological basis of skewed sex ratio
14. Ovarian epithelial cancer

Research Conducted

Completed:

1. Analysis for sperm aneuploidy of idiopathic oligoazoospermic & teratospermic men
2. Evaluation of molecular basis of clinical aggressiveness in cervical carcinoma of young age
3. Molecular basis of clinical aggressiveness in papillary thyroid carcinoma
4. Role of Cytokines in Premature Ovarian Failure (collaborative)
5. Double blind randomized clinical trial of polyherbal preparation Ashokarista on post-menopausal women (collaborative)
6. Evaluation of anembryonic pregnancy and early missed abortion product for chromosomal aneuploidy and uniparental disomy by molecular method
7. Chromosome aneuploidy and mosaicism in preimplantation embryo (human)
8. Chromosome aneuploidy and mosaicism in preimplantation embryo (mouse)
9. Prevalence of 22q11 deletion syndrome in children with structural cardiac malformation: a tertiary care referral hospital-based study in Delhi
10. Molecular Basis of Multiple Myeloma (collaborative)
11. Rapid Aneuploidy Diagnosis by PRINS
12. Spermiation Defect
13. Genetic & Endocrine Evaluation of Primary Testicular Failure

14. Understanding Dynamics of Skewed Sex Ratio
15. Macroprolactinemia
16. Premature ovarian failure
17. Polycystic ovarian disease
18. Testicular maturation arrest
19. An investigation for sub-microscopic chromosomal imbalances and uniparental disomy by array comparative genomic hybridization (aCGH) in FISH negative clinically suspected 22q11.2 microdeletion syndromes
20. Mechanism for phenotypic heterogeneity/variability in 22q11.2 microdeletion syndrome (ICMR)
21. An investigation to find out genetic factors in idiopathic familial ovarian failure
22. Poly Cystic Ovarian Syndrome (PCOS): An investigation to find out reasons for discrepancy between hyperandrogenism (clinical) & hyperandrogenemia (biochemical) and underlying etiologic (epigenetic & genetic) factors

Ongoing:

1. An investigation on underlying mechanism of PCOS in association with endocrine disrupting chemicals (Bisphenol A and Advanced Glycation End products)
2. An investigation on the role of genes of steroid biosynthesis pathway in PCOS patients with mildly high basal 17-OH-progesterone levels
3. Integrative Analysis of Ovarian Cancer Transcriptome to Identify Biomarkers and Potential Molecular Targets for Genome-guided Targeted Therapy

Submitted:

An investigation to explore genetic associations of Polycystic Ovary Syndrome (PCOS)

Visions

To create reproductive science center for the followings:

To develop reproductive genetics specialty
To develop reproductive endocrinology specialty
To develop NIPS facility
To develop semen cryopreservation (semen banking & AID) facility
To develop gamete, & gonad cryopreservation facility
To develop clinical embryology branches
To start courses (teaching/training) on Molecular Cytogenetics, Reproductive Genetics, Reproductive Endocrinology, Clinical Embryology & Cryopreservation, etc

Publications

Published Full Article

1. Haldar A, Sharma AK, Phadke SR, Jain A, Agarwal SS. OEIS Complex with Cranio-Facial anomalies: Defect of Blastogenesis? Am. J. Med. Genetics. 1994; 53: 21-23.
2. Sharma AK, Haldar A, et al. Postmortem Radiography of perinatal deaths: an aid to Genetic Counseling. Indian Pediatrics. 1994; 31(6): 702-706.
3. Phadke SR, Haldhar A, et al. GAPO Syndrome in a child without Dermal Hyaline Deposit. Am. J. Med. Genetics. 1994; 51: 191-193.
4. Sharma AK, Haldar A, et al. Preaxial Brachydactyly with Abduction of Thumbs & Hallux Varus: a distinct entity. Am. J. Med. Genetics. 1994; 49(3): 274-277.
5. Sharma AK, Phadke SR, Haldar A, et al. Jercolevine Syndrome: a case report. Indian Pediatrics. 1994; 31(6): 707-708.
6. Sharma AK, Haldar A, et al. Marshall-Smith Syndrome: further observations. Indian Pediatrics. 1994; 31(8): 1098-1100.
7. Buckshee K, Haldar A, et al. Bioeffects of Diagnostic Ultrasound in Newborn. J. Obst. & Gynecol India. 1994; 44(1): 859-862.
8. Tutschek B, Sherlock J, Halder A, Delhanty J, Rodeck C, Adinolfi M. Isolation of Fetal Cells from transcervical samples by Micromanipulation: Molecular confirmation of their fetal origin and diagnosis of fetal aneuploidies. Prenatal Diagnosis. 1995; 15(10): 951-960.
9. Adinolfi M, Sherlock J, Tutschek B, Halder A, Delhanty J, Rodeck C. Detection of Fetal Cells in Transcervical Sample & Prenatal Diagnosis of Chromosomal abnormalities. Prenatal Diagnosis. 1995; 15(10): 943-950.
10. Agarwal S, Kishore R, Haldar A, et al. Outcome of pregnancy in women with Recurrent Spontaneous Abortion following Immunotherapy with Allogenic Lymphocytes. Human Reproduction. 1995; 10(9): 2280-2284.
11. Kishore R, Agarwal S, Haldar A, et al. HLA sharing, Antipaternal Cytotoxic Antibodies & MLR Blocking Factors in women with Recurrent Abortions. J. Obstet. Gynaecol. Res. 1996; 22(2): 177-183.
12. Sherlock J, Halder A, Tutschek B, Rodeck C, Adinolfi M. Prenatal detection of fetal aneuploidies using transcervical cell samples. J Med Genet. 1997; 34: 302-305.
13. Halder A & Tutschek B. Analysis of meiotic segregation in human nondecondensed interphase spermatozoa by multicolor rapid direct FISH. Ind J Med Res. 1998; 107: 94-97.
14. Ruangvutilert P, Halder A, Jauniaux E, Arienzo M, Cirigliano V and Sherlock J. A minimally invasive prenatal diagnosis technique for the collection of transcervical cells. Prenatal Neonatal Medicine 1998; 3: 294 - 296.
15. Halder A, Pahi J, Pradhan M, Pandey A, Gujral R, Agarwal SS. Iniencephaly: a report of 19 cases. Ind Pediatrics. 1998; 35: 891 - 896.
16. Halder A, Pahi J, Sharma AK, Bhatia VL, Phadke RV, Gujral R & Agarwal SS. Osteodysplastic Primordial Dwarfism Type II with normal Mentation and delayed CNS Myelination. Am. J. Med. Genet. 1998; 80: 12-15.
17. Pahi J, Phadke SR, Halder A, Agarwal SS, et al. Does autopsy of antenataly diagnosed malformed fetuses aid genetic counseling? The National Medical Journal of India. 1998; 11(4): 169-170.
18. Jauniaux E, Halder A, Partington C. A case of partial mole associated with trisomy 13. Ultrasound Obstet Gynaecol. 1998; 11(1): 62-64.

19. Halder A & Park YK. Identification of the appropriate tissue from formalin fixed perinatal autopsy material for chromosomal ploidy detection by interphase FISH. Ind J Med Res. 1999; 110: 102-106.
20. Phadke SR & Halder A. Fluorescent in situ hybridization: A novel method to study chromosomes and genes. Perinatology 2000; 2(4): 203-210.
21. Halder A, Pahi J, Chadda V and Agarwal SS. Sirenomelia Sequence associated with craniorachischisis totalis, limb reduction and primitive heart: a case report. Indian Pediatr. 2001; 38 (9): 1041-5.
22. Halder A. Trisomy 21 beyond 1st trimester: are they all mosaic? Evidence to support. Asian J Obs & Gynae Practice, 2002; 6 (2): 30-34.
23. Halder A, Agarwal S & Chaddha V. Genetic counseling in obstetric practice. Obstetrics & Gynecology Today 2002; VII (6): 310-318.
24. Chaddha V, Agarwal S, Phadke SR & Halder A (corresponding author). Low Level of Mosaicism in Atypical Prader Willi Syndrome: Detection using Fluorescent In Situ Hybridization. Indian Pediatrics 2003; 40: 166-168.
25. Agarwal S, Chadda V, Ram Sharan and Halder A (corresponding author). Rapid prenatal diagnosis of trisomy 18 by interphase FISH. Asian Journal of Obs & Gynae Practice 2003; 7 (1): 14–15 & 23.
26. Pandey MK, Halder A, Agarwal S, Srivastava M, Agarwal SS, Agrawal S. Immunotherapy in Recurrent Spontaneous Abortion: Randomised and Nonrandomised trials. The Internet Journal of Gynaecology and Obstetrics 2003; 2(1): rsa/xml (13 pages).
27. Halder A, Panigrahi I & Pal L. Fowler like syndrome with extreme oligohydramnios & growth restriction and without muscle hypoplasia: first case from Indian subcontinent. Ind Pediat 2003; 40: 418-423.
28. Halder A, Chaddha V, Agarwal S, Fauzdar A. Absence of sperm meiotic segregation error of chromosomes 1, 9, 12, 13, 16, 18, 21, X and Y in a case of 100 % necrozoospermia. Asian J Androl. 2003 Jun; 5(2): 163-166.
29. Nagpure NS, Kushwaha B, Srivastava SK, Halder A and Ponniah AG. Comparative chromosome painting in fish using human sex chromosome probes. Indian J Fishery 2003; 50: 103-106.
30. Halder A, Halder S, Fauzdar A, Kumar A. Molecular approaches of chromosome analysis: an overview. Proc. Indian Nat. Sci. Acad. 2004; B70 (2): 153-221.
31. Halder A, Agarwal S, Pandey A. Iniencephaly and Chromosome Mosaicism: A Report of Two Cases. Congenital Anomalies 2005; 45: 102-105.
32. Halder A, Fauzdar A, Kumar A. Serum Inhibin B and Follicle Stimulating Hormone Levels as Markers in the Evaluation of Azoospermic Men: A Comparison. Andrologia 2005; 37: 173-179.
33. Halder A, Fauzdar A, Kabra M and Saxena A. Detection of 22q11.2 hemizygous deletion by interphase FISH in a patient with features of CATCH22 Syndrome. Ind Pediatr. 2005; 42: 1236-1239.
34. Halder A, Halder S, Fauzdar A. A Preliminary Investigation on Molecular Basis for Clinical Aggressiveness in Cervical Carcinoma by Comparative Genomic Hybridization and Conventional Fluorescent In-situ Hybridization. Ind J of Med Res. 2005; 122: 434-446.
35. Halder A. Placental chimerism in early human pregnancy. Ind J of Hum Genet 2005; 11 (2): 84-88.

36. Halder A and Fauzdar A. Extreme Skewing of Sex Ratio and Low Aneuploidy in Recurrent Early Missed Abortion. Ind J Med Res 2006; 124: 41-50.
37. Halder A. Skewed Sex Ratio in India. Ind J Med Res 2006; 124: 583-584.
38. Halder A, Fauzdar A. Potential use of blood, buccal and urine cells for rapid noninvasive diagnosis of suspected aneuploidy using FISH. Journal of Clinical & Diagnostic Research 2007; 1 (2): 32-38.
39. Halder A, Fauzdar A, Ghosh M, Kumar A. Serum Inhibin B: A Direct, Precise & Noninvasive Marker of Ovarian Function. Journal of Clinical & Diagnostic Research. 2007; 1(3): 131-137.
40. Halder A. Nonimmunologic Hydrops Fetalis Associated with True Knot of Umbilical Cord: A Necropsy Study. J Turkish German Gynecol Assoc. 2007; 8(4): 420-423.
41. Halder A. Unexplained Ten Consequetive Early Third Trimester Intrauterine Fetal Deaths: A Diagnostic Dilema. The Internet Journal of Gynecology and Obstetrics. 2007; Volume 7, Number 2. (IUD_0910.doc)
42. Halder A. Premature Graying of Hairs, Premature Aging and Predisposition to Cancer in Jajjal, Punjab: A preliminary observation. Journal of Clinical & Diagnostic Research 2007; 6: 577-580.
43. Halder A, Gupta RK. Male like external genitalia with epididymis in a case of 46,XX disorder of sex development due to congenital adrenal hyperplasia. Journal of Research in Medical Sciences 2008; 13(3): 141-145.
44. Halder A, Jain M, Kabra M, Gupta N. Mosaic 22q11.2 microdeletion syndrome: diagnosis and clinical manifestations of two cases. Molecular Cytogenetics 2008; 1: 18.
45. Fauzdar A, Sharma RK, Kumar A, Halder A. A Preliminary Study on Chromosome Aneuploidy and Mosaicism in Early Preimplantation Human Embryo by Fluorescence *In Situ* Hybridization. Ind J Med Res 2008; 128 (3): 287-293.
46. Fauzdar A, Halder A, Kumar A. Effect of gonadotropins on chromosome aneuploidy, chromosome mosaicism and skewed sex ratio in mouse preimplantation embryos. Ind J Med Res 2009; 129: 669-675.
47. Yadav N, Sumod K, Kumar S, Jain M, Halder A, Saxena R, Mukhopadhyay A. Therapeutic effect of bone marrow-derived liver cells in phenotypic correction of murine hemophilia A. Blood; 2009 114: 4552-4561.
48. Shukla B, Agarwal S, Suri V, Pathak P, Sharma MC, Gupta D, Sharma BS, Suri A, Halder A, Sarkar C. Assessment of 1p/19q status by fluorescence *in situ* hybridization assay: A comparative study in oligodendroglial, mixed oligoastrocytic and astrocytic tumors. Neurol India 2009; 57: 559-566.
49. Halder A. Amniotic Band Syndrome and/or Limb Body Wall Complex: Split or Lump. The Application of Clinical Genetics 2010; 3: 7-15.
50. Halder A. 46, XY Disorder of Sex Development with Mullerian Ducts Remnants. Journal of Clinical & Diagnostic Research 2010; 4: 2169-2174.
51. Halder A, Jain M, Chaudhary I, Kabra M. Prevalence of 22q11.2 microdeletion in 146 patients with cardiac malformation in a referral hospital of North India. BMC Medical Genetics 2010; 11: 101.
52. Halder A, Jain M, Chaudhary I and Varma B. Chromosome 22q11.2 microdeletion in monozygotic twins with discordant phenotype and deletion size. Molecular Cytogenetics 2012; 5:13 (JIF 2.41; ICV 5.61).

53. Jain M, Halder A. Sertoli cell only syndrome: Status of sertoli cell maturation and function. Indian J Endocr Metab 2012; 16: S514-515.
54. Halder A, Jain M and Chaudhary I. Rapid Detection of Chromosome X, Y, 13, 18 & 21 Aneuploidies by Primed In Situ Labeling/Synthesis (PRINS) Technique. Ind J Hum Genet 2013; 19 (1): 14-17.
55. Jain M, Mohan V, Chaudhary I, Halder A. Sertoli cell only syndrome and glaucoma in a SRY positive XX infertile male. Journal of Clinical & Diagnostic Research 2013; 7 (7): 1457-1459.
56. Halder A, Jain M, Chaudhary I, Gupta N and Kabra M. Fluorescence *in-situ* hybridization (FISH) using non-commercial probes in the diagnosis of clinically suspected microdeletion syndromes: an experience with 301 cases. Ind J Med Res 2013; 138: 135-142.
57. Halder A. Advances in Cytogenetics (editorial). JBR Journal of Clinical Diagnosis and Research. 2013; 16:e101.doi:10.4172/jcdr.1000e101. Volume 1 Issue1 1000e101.
58. Halder A. Disorder of Sex Development: spectrum of disorder in a referral tertiary care hospital in Northern India. The Global Journal of Human Genetics & Gene Therapy. 2013; 1 (2): 77-89.
59. Halder A. Cytogenetics to Cytogenomics: transition from Chromosome to DNA sequence. The Global Journal of Human Genetics & Gene Therapy. 2013; 1 (2): 90-104.
60. Halder A, Jain M, Chawdhary I, Kumar G, Das TK, Gupta YK. Dark Colored Semen in Non-obstructive Azoospermia: A Report of 4 Cases, Andrologia 2014; 46 (3): 316–321.
61. Halder A. Lethal Developmental Defects: An Overview. Open Journal of Obstetrics and Gynecology 2014; 4: 1006-1036.
62. Chaudhary I, Jain M, Halder A. Sperm sex ratio (X:Y ratio) and its variations. Austin J Reprod Med Infertil. 2014;1(1): 7 (arjm-v1-id1003).
63. Halder A. Genetic counseling for infertile couples. ISSRF News Letter 2015; sp issue 16: pp 14-19.
64. Halder A. Canceromics and P3 medicine (editorial). JBR J Clin Diagn Res 2015; 3: 1 (1000e104). doi:10.4172/jcdr.1000e104 (2 pages)
65. Sharma P, Gupta N, Roychowdhury M, Phadke SR, Sapra S, Halder A, Ghosh M and Kabra M. Williams-Beuren syndrome: Delineation of clinical phenotype and diagnostic utility of MLPA: Experience of 43 patients from a tertiary care centre in India. Cytogenetic and Genome Research 2015: Sep 10 (DOI:10.1159/000439205)
66. Halder A, Jain M and Kumar P. Primary Testicular Failure: An Overview. J Clin Diagn Res 2015; 3: 1 (1000e105). doi:10.4172/jcdr.1000e105 (5 pages)
67. Halder A. Reproductive Genetic Counseling in Genomic Era. EC Gynaecology 2015; 2 (1): 132-148.
68. Halder A, Jain M, Kalsi AP. SNP Microarray in FISH Negative Clinically Suspected 22q11.2 Microdeletion Syndrome. Scientifica 2016; 18 pages (http://dx.doi.org/10.1155/2016/ 5826431).
69. Halder A. Reproductive Genetics (editorial). JBR Journal of Clinical Diagnosis and Research 2016; 4: 106 (2 pages). doi:10.4172/2376-0311.1000e106
70. Halder A. Approach to Prenatal Fetal Malformations. EC Gynaecology 2016; 3 (3): 294-307.
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74. Halder A, Kumar P, Jain M, Kalsi AP. Genomics: Tool to predict & prevent male infertility. Front Biosci (Schol Ed). 2017; 9: 448-508.
75. Kumar P, Jain M, Kalsi AK, Halder A. Molecular characterization of a case of dicentric Y presented as non-obstructive azoospermia with testicular early maturation arrest. Andrologia, 2017; 50: e12886. DOI: 10.1111/and.12886
76. Halder A, Jain M, Kalsi APK. Mosaicism in 22q11.2 Microdeletion Syndrome. J Clin Diagn Res. 2018; 12 (11): GC01-GC06.
77. Kalsi AK, Halder A, Jain M, Chaturvedi PK, Sharma JB. Prevalence and Reproductive Manifestations of Macroprolactinemia. Endocrine 2019; 63: 332-340
78. Kalsi AK, Halder A, Jain M, Chaturvedi PK, Mathew M, Sharma JB. Association of raised levels of IL-4 and anti-TPO with hyperprolactinemia. Am J Reproductive Immunology 2019; 81: e13085 (doi: 10.1111/aji.13085)
79. Kalsi AK, Halder A, Jain M, Srivastava A. Association of Cadmium, Chromium, Manganese and Lead with hyperprolactinemia. Journal of Clinical and Diagnostic Research 2020;14:4-7.
80. Halder A, Kumar H. Polycystic Ovary Syndrome (PCOS): The Pros and Cons of Various Diagnostic Criteria. EC Gynaecology 2020; 9(12): 39-41.
81. Kalsi AK, Jain M, Halder A. An investigation on bone mineral density in hyperprolactinemia. Journal Endocrinology and Reproduction 2020; 24 (2): 107-121.
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93. Rana R, Mohanty S, Halder A. Salient Yet Silent: A Need for Strategies to Cope with Violence against Infertile Women during COVID-19 Pandemic. EC Gynaecology 2021;10(1):29-31.
94. Sharma M, Halder A. Understanding Basic Concepts of Premature Ovarian Failure. EC Gynaecology 2021; 10 (11): 25-36.
95. Kumar H, Halder A, Sharma M, Kalsi AK, Jain M. Dihydrotestosterone: a potential biomarker of hyperandrogenaemia in PCOS. J Clin and Diag Res 2022; 16(2): QC09-QC14.
96. Rana R, Sharma M, Halder A. New insights into the mechanism of pathogenesis of fragile X-associated premature ovarian failure. EC Gynecology 2022; 11.7 (6 pages).
97. Halder A, Kumar H, Sharma P, Sharma M, Jain M. Polycystic Ovary Syndrome (PCOS): An Overview. Journal of Endocrinology and Reproduction 2022 (in press; September issue)
98. Halder A. Book Review: Human Reproductive Genetics: Emerging Technologies and Clinical Applications (edited by Juan A Garcia-Velasco and Emre Seli; ISBN: 978-0-12-816561-4). Ind J Med Res (IJMR_145_22) accepted (in press).
99. Halder A, Kumar H, Sharma M, Jain M, Kalsi AK. Serum Anti-Müllerian hormone (AMH): most potential biomarker of PCOS from North India. Ind J Med Res (IJMR_4608, accepted, in press)
100. Sharma P, Jain M, Halder A*. Whole Exome Sequencing identifies rare variants in obesity- and hyperinsulinemia-related genes in PCOS patients with high BMI and fasting insulin. Indian Journal of Endocrinology and Metabolism 2022 (under review)
101. Sharma P, Jain M, Halder A*. An investigation of steroid biosynthesis pathway genes in PCOS patients from North India. Journal of Human Reproductive Sciences 2022 (under review)

Proceeding/Newsletter (full articles)

1. Halder A. Approach to Fetal Malformations. In: Proceeding (The wonderful World of Clinical Genetics) of IAMGCON 2015 Jodhpur, India; pp.56-69.
2. Halder A. Genetic counselling for infertile couples. ISSRF News Letter 2015; special issue 16: pp 14-19.

Books/Monographs/Manual

1. Handbook on Medical Genetics and Genetic Counselling. Edited by Marwaha RK, Panigrahi I & Halder A. Noble Vision (Medical Book Publishers; ISBN No. 978-81-906227-4-5) First Edn. 2013. pp 1-233.
2. Handbook on Medical Genetics and Genetic Counselling. Edited by Panigrahi I & Halder A. Noble Vision (Medical Book Publishers; ISBN No. 978-81-906227-4-5) Second Edn. 2021. pp 1-347.
3. Advances in Human Cytogenetics (CME Monograph Series II of National Academy of Medical Sciences, India). Editor: Halder A. 2002 pp 1-130.
4. Molecular Cytogenetics Manual. Edited by Halder A & Manish Jain. 2012 pp 1-57.

Book Chapters

1. Halder A. Advances in Human Cytogenetics: an overview. In: Advances in Human Cytogenetics (CME Monograph Series II of National Academy of Medical Sciences of India). Editor: Halder A. 2002; pp.1-38.
2. Halder A, Fauzdar A & Kumar A. Extreme Skewing of Sex Ratio in Recurrent Early Missed Abortions. In: Human Reproduction; Editors: Genazzani AR, Schenker J, Artini PG, Simoncini T; Publisher: CIC Edizioni Internazionali, Roma, 2005; vol. 2 pp. 69-73.
3. Halder A, Fauzdar A & Kumar A. Do gonadotropins used for ovarian stimulation in assisted reproduction cause increase in chromosome aneuploidy, chromosome mosaicism and skewed sex ratio in embryos? In: Gonadal and Nongonadal Actions of Gonadotropins. Editor: Kumar A, Rao CV, Chaturvedi PK; Publisher: Narosa, New Delhi, 2010; vol. 1 pp.327-337.
4. Halder A. Clinical & Molecular Cytogenetics. In: API text book of medicine Editor: YP Munjal, 9th edition. 2012, Vol.1, Ch 3. pp 180-188.
5. Halder A. Clinical, Conventional & Molecular Cytogenetics. In: API text book of medicine Editor in chief: Dr. YP Munjal, 10th edition. 2014 (released on March 2015), Vol.1, Ch 3.
6. Halder A. Clinical, Conventional & Molecular Cytogenetics. In: API text book of medicine Editor in chief: Dr. Sandhya A. Kamath, 11th edition. 2018, Vol.1, Ch 3
7. Halder A. Clinical, Conventional & Molecular Cytogenetics. In: API text book of medicine Editor in chief: Dr. Sandhya A. Kamath, 12th edition. 2022, Vol.1, Ch 3
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Miscellaneous

1. Contribution in commercial syndrome data base computer software programme: London Dysmorphology Data Base, London, UK (LDDB) on Osteodysplastic Syndrome
2. Contribution in commercial syndrome data base computer software program: Possum Database, Melbourne, Australiaon Osteodysplastic Syndrome
5. Contributed to London Dysmorphology & Neurogenetics Databases for its Ophthalmo-genetics or GENEEYE (latest addition) for its photographic library on Amniotic bands of early amnion rupture.

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