

A REVIEW OF AN ARTIFICIAL INSEMINATION & IT'S MEDICO - LEGAL ASPECTS

Kaushik Yuvraj¹ S.R.Inchulakar² Bhaghat Sangeeta³ Patel Deepti⁴

¹Lecturer, PG Department of Agadtantra Evam Vidhi Vaidyak

²Professor and HOD, PG Department of Agadtantra Evam Vidhi Vaidyak

³Lecturer, PG Department of Agadtantra Evam Vidhi Vaidyak

⁴PG Scholar 1st year PG Department of Agadtantra Evam Vidhi Vaidyak, NPA Government Ayurvedic college Raipur, Chhattisgarh, India

ABSTRACT

In this modern era our medical science is developing their techniques day by day to treat the diseases related to human being, Artificial insemination technique is one of them. In today's fast life there are number of cases of infertility. This is due to the stress factor and the changing life style with the increase in marital age and late diagnosis of infertility, artificial insemination is a widely used method. Before advising this method the doctors should be aware of its medico-legal aspects as it may be troublesome for them later. Also the doctors should give the patient a clear idea of the medico-legal aspects as it may later cause problems. Now a day's our Indian society also have no problems in this technique and they also accept child who is born from either AIH (Artificial insemination homologous / husband) or AID (Artificial insemination by donor). Some times in case of AID there are many medico-legal problems like – Legitimacy, Adultery, and Incest and Psychological aspects. This article mainly focuses light over medico-legal aspects in artificial insemination.

Key words- Artificial insemination, Infertility, Medico-legal aspects, AIH, AID.

INTRODUCTION: Artificial insemination is defined as the deposition of semen in the vagina, the cervical canal, or the uterus by instruments to bring about pregnancy which is not attached or is not attainable by sexual intercourse.¹

Semen can be introduced into the Vagina (Intra Vaginal Insemination-IVI), Cervix (Intra Cervical Insemination-ICI), Fallopian tube (Intratubal insemination-ITI), or Uterine cavity (Intra Uterine Insemination-IUI) of the recipient. IUI is the most commonly used method of Artificial Insemination (Higher success rate) and ITI (More invasive, greater risk of infection and higher costs) is the least commonly done AI. In medico-legal point of view it is seen in the cases of nullity of

marriage, divorce, legitimacy, Adultery, unmarried women or widow etc.² There are numbers of couples or women got child from this technique in their 1st attempt and also there are many numbers who does not get child in their many attempts because it all depends on women's physiological conditions (time of ovulation, healthy eggs, quality of semen) and good procedure techniques.

TYPES

1. AIH (Artificial insemination homologous / husband) - If the semen of woman's husband is used, the procedure is called artificial insemination homologous.
2. AID (Artificial insemination by donor) - If the semen of some other unrelated

donor is used it is called AID or heterologous artificial insemination.³

3. AIHD - In order to side step certain psychological and legal issues, the husband's semen may be mixed with that of the donor, so there is a technical possibility that the husband may actually be the father of the child.⁴

Indications for Artificial Insemination

1. When the husband is impotent but fertile.
2. When the husband is sterile.

3. Where there is Rh incompatibility between husband and wife.

4. When the husband is suffering from some hereditary disease so as to prevent mentally or physically handicapped child being born.

5. When a widow or unmarried woman wants to have child.

In the first case, AIH is practiced, while in the next two, AID or AIHD and last two AID.⁵

Differentiation Between AIH and AID⁶

S.No.	Feature	AIH	AID
1.	Principle	Semen used is derived from woman's husband	Semen of person other than husband is used
2.	Indications	Male factor <ul style="list-style-type: none"> • Impotency • Defects of penis, e.g. hypospadias • Retrograde ejaculation • Decreased sperm counts, motility or quality Female factors <ul style="list-style-type: none"> • Scant / unreceptive mucus • Persistent cervicitis • Cervical stenosis 	<ul style="list-style-type: none"> • Husband sterile • Husband suffering from hereditary disease • Widow/ unmarried desiring children • Rh incompatibility
3.	Consent	Needed from both husband and wife	Needed from husband, wife, donor, and donor's wife
4.	Pre- condition	None	Donor should have his own child
5.	Relation with recipient	Husband	Must not be a related to either spouses
6.	Donor characteristics	Nothing specific	Must be < 40 years, should resemble closely to the husband in race
7.	Medical tests	Routine tests	Tuberculosis, diabetes, epilepsy, Rh grouping, psychosis, endocrine dysfunction, hereditary or familial disorders and HIV are ruled out
8.	Disclosure of identity	Not a problem, wife knows	Donor and recipient should not know
9.	Outcome of AI	Known to the husband	Donor should not know
10.	Confidentiality	None	Strictly maintained

11.	Doctor's role	May deliver the child who administered the AI	Should avoid delivering the child, as it would lead disclosing the
12.	Legal problems	No legal complications, except for divorce	Legal problems, like litigation against the doctor, illegitimacy, inheritance claims, divorce, incest and mental trauma may arise

Procedure⁷

Semen is obtained by masturbation after a week's abstinence and 1 ml is deposited by means of sterile needleless syringe just above the internal os, at the time of ovulation (14th day after menstruation)

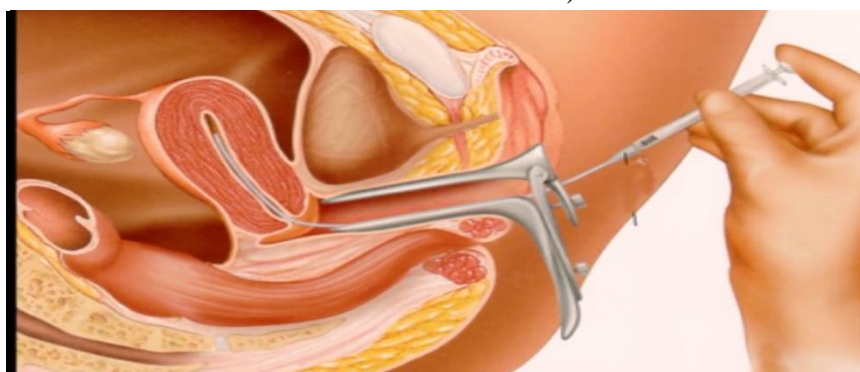


Figure: 1 Artificial insemination

- The semen to be implanted is washed in a laboratory and concentrated in hams F 10 media without L-glutamine, warmed to 37⁰C .This washing increases the chances of fertilization while removing mucus and non-motile sperm in the semen.
- A more efficient method of AI is to insert semen directly into the women's uterus. When this method is employed, it is important that only 'washed' semen is used and inserted by means of a catheter.
- The success rates of AI vary depending on the type of insemination used, but typically the success rate can be affected by factors such as stress, and quality of the egg and sperm.

Guiding Principles^{8,9}

AIH do not raise significant ethical or medico legal problem but due care should be taken while doing AID.

- Consent-written informed consent of both parties (i.e. the husband and wife of recipient & husband and wife of donor) should be obtained.
- Confidentially should be maintained identity of donor or the recipient should not be revealed to anyone.
- A female nurse should be present when the insemination procedure is carried out.

Regarding Donor-

- Be less than 40 year.
- Should have no relation with recipient couple.
- Should have children of his own.
- Should be potent and fertile.
- Should be in sound mind and health and free from any hereditary or sexually transmitted disease (STD).

Medicolegal Aspects¹⁰

1. **Danger of litigation-** The doctor may be sued following the birth of a

defective child, To avoid this the donor must be screened for any genetic defects.

2. **Nullity of marriage and divorce:** It is not a ground for divorce, if AI is done for sterility. If AI is due to impotence, it is a ground. If AID is done without the consent of the husband, then he can file for divorce and sue the doctor.

3. **Legitimacy:** The artificiality of the process would make no difference in legitimacy in case of AIH, and child would be legitimate child. Since the husband is not the actual father of the child in AID, child is illegitimate and cannot inherit property, but for all practical purpose, the husband is accepted as father of the child and treated as legitimate and can inherit property.

4. **Adultery:** Recipient cannot be held guilty of adultery because there is no physical union by coitus. Moreover, the Indian law specially provides that the woman cannot be punished for adultery in any case.

5. **Incest:** Risk of incestuous relationship between the offspring born by AI and children of donor is possible.

6. **Natural birth:** Status remains legitimate, but that of AID remains illegitimate.

7. **Unmarried women or widow:** There is no legal bar on an unmarried woman/ widow going for AID. A child born to a single woman through AID would be deemed to be legitimate. However, AID should be performed only on married woman with the written consent of her husband. A child born through AIH with the stored sperms of her deceased husband is considered to be legitimate, despite the existing law of presumptive under the Indian Evidence Act.

8. **Psychological aspect:** If it is known that the husband consented to AID and the husband was not capable of consummating the marriage, difficulties may arise. The identity of the donor is kept secret; nevertheless, it is not uncommon for such secrets to be leaked out with adverse consequences.

9. **Rights of sperm donor:** Are debatable issue nowadays.

Currently, there are no laws regarding artificial insemination in India, however Indian Council of medical Research has framed national guidelines.

Semen Banking: AIH after death of the Husband - The human semen can be preserved by freezing. The possibility that human semen can be preserved does not create additional problems where the semen used is that of the donor, but some complex legal issues may arise if the used was that of her husband. It may be argued (where the mother is not remarried after death of her husband) that such a 'posthumous' child is legitimate because the child, although not conceived during the marriage, may be regarded as a child of the marriage. The practice of insemination of a woman with her husband's semen after his death is not yet commonplace. Such developments may have to be faced in the not too distant future.

In India, the services of semen banks are available in some states. In Delhi artificial Insemination Human Act 1995 regulates and controls the functioning of the semen banks.

The Delhi Artificial Insemination (human) Act, 1995 – This Act is applicable in the National Capital Territory of Delhi. It regulates the donation, sale and supply of human semen and ovum for the purpose of artificial insemination. It requires registration and yearly renewal by

any person intending to carry on a semen bank. The semen bank before accepting the semen for artificial insemination shall test the donor for the presence of human immune deficiency Virus type 1 and 2 (HIV 1 and 2), antibodies by Enzyme linked immune Sorbent Assay (ELISA) kit, and screen for HIV surface antigen ; and, if found negative, only then the donor shall be allowed freezing or any other safe method for a minimum period of three months in order to exclude window period of HIV 1 and 2 infections in the donor. Second ELISA test is performed on the donor after three months, and if negative, the semen shall then be used. It is also required by the practitioner, under this Act to:

- a) Seek the written consent of the husband and the wife, seeking artificial insemination.
- b) Test the recipient for HIV and other sexually transmitted diseases before performing AI.
- c) Not segregate the XX/YY chromosomes for AI.
- d) Seek the written consent of the recipient for using the semen on the basis of only one ELISA test, being negative, where facilities for cryo-preservation and liquid nitrogen for semen are not available.¹¹

DISCUSSION : Artificial insemination techniques are used all over the world to bring out pregnancy in women who did not get child by natural ways. Changing lifestyle, increasing focus of modern women regarding planned parenthood, postponing childbearing due to uninterrupted full time career are major factors anticipated to drive the growth of the global artificial insemination market. Artificial insemination is legal in most countries but there are some rules and regulations of insemination that have to be

followed. However, there are no complete or perfect standard protocols regarding Artificial insemination.

The advantages of A.I. in cases of male infertility, impotence, low sperm count issue, cervical issues etc. & also it is safer and affordable. A.I. enables single women and lesbian couples to be on motherhood. There are no legal issues in children that is born from A.I.H. technique but in case of A.I.D. some medico legal issues i.e. adultery, chances of incestuous relationship, child is illegitimate and cannot inherit property, without the consent of the husband, then he can file for divorce and take legal action to the doctor, psychological problems may arise in this conditions. So the A.I. centre should always follow the guidelines otherwise legal problems arise.

CONCLUSION: Artificial insemination technique is a boon for those couples who have not a child since many years after marriage. Its success rate varies person to person and depend upon quality of ovum and sperm. There are many advantages if proper guidelines are followed by doctor and patient, if not followed then some legal issues (adultery, incest, legitimacy, divorce etc) and genetic disorders, sexual transmitted diseases may come.

REFERENCES

1. Prof CK Parikh, Parikh's textbook of medical jurisprudence, forensic medicine and toxicology, published by CBS publishers and distributors pvt.ltd, 7th edition 2016, p371.
2. Gautam biswas ,Review of forensic medicine and toxicology, published by jaypee brothers medical publishers(p) limited, 3rd edition 2015, page no.350.
3. Ajay kumar, Textbook of forensic medicine , published by avichal publishing company, 2nd edition 2016,page no.258

4. Prof CK Parikh, Parikh's textbook of medical jurisprudence, forensic medicine and toxicology, published by CBS publishers and distributors pvt.ltd, 7th edition 2016, p371.
5. Prof CK Parikh, Parikh's textbook of medical jurisprudence, forensic medicine and toxicology, published by CBS publishers and distributors pvt.ltd, 7th edition 2016, p371
6. Gautam biswas, Review of forensic medicine and toxicology, published by jaypee brothers medical publishers(p) limited, 3rd edition 2015, page no.350.
7. Gautam biswas, Review of forensic medicine and toxicology, published by jaypee brothers medical publishers(p) limited, 3rd edition 2015, page no.350.
8. Rajesh bardale, Principles of forensic medicine & toxicology, 2nd edition 2017, page no. 420
9. Prof CK Parikh, Parikh's textbook of medical jurisprudence, forensic medicine and toxicology, published by CBS publishers and distributors pvt.ltd, 7th edition 2016, p371

10. Gautam biswas , Review of forensic medicine and toxicology, published by jaypee brothers medical publishers (p) limited, 3rd edition 2015, page no.351.
11. Jaising p modi, A textbook of medical jurisprudence and toxicology, published by lexis nexis 24th edition 2013, page no.613.

Corresponding Author:Dr. Yuvraj Kaushik, Lecturer, Pg Department Of Agadtanta Evam Vidhi Vaidyak, NPA Government Ayurvedic College Raipur, Chhattisgarh
India Email Id -Dryuvraj2@Gmail.Com
Mobile No. 9098685729

Source of support: Nil; Conflict of interest:
None Declared

Cite this Article as : [Kaushik Yuvraj et al : A Review of an Artificial insemination & It's Medico - Legal Aspects] www.ijaar.in : IJAAR VOLUME III ISSUE VIII MAY -JUNE 2018 Page No:-1140-1145.