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Effect of Kaala Basti and Uttara Basti in Female Infertility (Low AMH): A Single Case Study

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ABSTRACT

Infertility is defined as a failure to conceive within one or more years of regular unprotected coitus, though it is not only a physically disabling disorder but has far reaching psychological and social consequences[1]. In India the prevalence of infertility of married women currently is 4.6%. Ayurveda not only aim at getting offspring, but to get a healthy one. The success rate of in-vitro fertilization (IVF) techniques depends largely on the ovarian response at the time of oocyte retrieval which eventually reflects on the ovarian reserve[2].

According to ayurvedic classics Artava is upadhatu of rasa dhatu and again Artava has all qualities of rakta. Under Artava menstrual blood and ovum are included. The term 'ovarian reserve' describes the number and quality of remaining oocytes in the ovaries. Low AMH level can be compared to Dhatukshayajanya Vandhyatva. The present case report documents the efficacy of an Ayurvedic treatment protocol in improving the AMH value which helped in conceiving. Here in this case study I selected a case of primary infertility having low ovarian reserve (AMH - 1.2ng/dl). Drug used in the treatment of patient for Kaalabasti and Uttarabasti has the properties of rakta sangrahakara, rakta stambaka and rajodoshahara.

KEYWORDS: *Vandyatva, Artava, Kaala Basti, Uttara Basti, AMH (Anti Mullerian Harmone)*

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INTRODUCTION

Infertility – the inability of a couple to conceive after one year of unprotected intercourse. It is of two types, Primary infertility – refers to couples who have not become pregnant after at least 1 year having sex without using birth control methods and Secondary infertility – refers to couples who have been able to get pregnant at least once, but now are unable[3]. The success rates of *in vitro* fertilization (IVF) techniques depend largely on the ovarian response at the time of oocyte retravel which eventually reflects on the ovarian reserve. Anti-Mullerian hormone (AMH) is a promising marker of ovarian reserve that is produced by the granulosa cells of preantral and antral follicles. After production, AMH is released into the circulation from the granulosa cells and can be measured in plasma. AMH has the potential to predict future reproductive lifespan and is therefore considered to be the best endocrine marker for assessing age-related decline of ovarian pool in healthy women[4]. Since AMH level is indicative of ovarian response, its measurement becomes an inevitable criteria before IVF. Considering the high cost and possible complications of ART procedures, the unavoidable role of AMH as a superior candidate predicting ovarian reserve has been explored in various studies. Therefore, uncertainty in the Assisted Reproductive Techniques (ART) procedure outcome can be minimized to a greater extent. Acharya Sushruta says, Basti is useful in treatment of tridoshas even in derangement of rakta dhatu, the functions like shodhana, shamana, sangrahana are brought by it, it causes increased libido in ksheena shukra, increases the weight of krusha person and vice versa, delays degenerative changes, imparts optimal functioning of organs, increases strength and life span[5].Where Uttara basti is indicated in rajo nasha, yoni dushti etc. According to Acharya Sushruta, four factors are required for healthy conception which are rutu, kshreta, ambu, beeja. Among them beeja is a core stone of female reproductive process and in its absence conception cannot achieve despite of all other factors, here beeja is taken as antahpushpa i.e

ovum. So in our classics the Basti is well definied by acharyas and is well acting for anulomana of apana vayu which is the main vitiating factor of genital system physiology. So here we selected the basti treatment for the infertility patient with low ovarian reserve.

Drug Review:-

For Kaala Basti

Anuvasana basti: Kashmaryadi ghrita
Asthapana basti:
Madhu-96ml
Lavanam-12gm
Sneha-96ml
Kalka (shatapushpa choorna)-24gm
Kwatha (kashmari,kutaja)-288ml

For Uttara basti

Kashmaryadi ghrita-3 to 5ml

Case study:-Patient of primary infertility with age of 33yrs and married life of 6 ½ years, with regular menses and not a known case of hypothyroidism, hypertension, diabities mellitus. where her USG scan and HSG was with normal study, with AMH value of 1.58ng/Ml which is considered to be a low fertility range where is advised for the In Vitro Fertilization. Because of the cost effect of the IVF treatment, where she was not affordable. For this she approached the outpatient ward of our Hospital. Family history was negative for any premature ovarian failure or low AMH. Her personal history revealed a irregular bowel habit and disturbed sleep, her appetite was decreased and with tongue coated. She attained menarche at the age of 14years with 3-5 days duration in 28 days interval, her blood pressure was 120/80mmHg, pulse rate 70/min. She is of *Vata Kapha Prakriti* with *avara Satva* (low mental strength) with Kroora Koshta (constipated), her physical examination of external genitalia did not revealed any abnormal findings. Per speculum examination showed a healthy nulliparous cervix without any significant abnormality.

Diagnostic focus and assessment:-

In the view of symptoms of Artava Kshaya (beeja dushti artava kshaya).The present case was diagnosed as Avarana janya Dhatukshaya Vandhyata (infertility due to depletion of body tissues). The assessment was done by comparing AMH value before and after the treatment that is Kaala Basti followed by Uttara Basti. Baseline AMH value was 1.2 ng/ml (reference range: 2.2-4.0).

Therapeutic focus and assessment:-

The therapeutic plan was to administer Kaala Basti followed by Uttara basti with Kaashmaryadi Ghrita[6]. As a Poorva Karma Deepana and Pachana was done with Vaishavanara Churna, as she attained Nirama Lakshana (signs of digestion of Ama) by 3 days and Koshta Shodhana with Eranda taila was given on previous day of Kaal Basti. After which Kaala Basti[7] was started with Kaashmari Kutaja Kashaya for 8 days in morning and evening pattern. After Kaala Basti Dwi parihara kala was advised, when she attained her menstrual cycle, she was advised to come to the hospital for Uttara Basti for 3days continuously with a gap of 3days and same treatment again for 3days.After this she was discharged from the hospital.

RESULT: Follow up was done 5days after the Uttara Basti and done with investigation as AMH increased from 1.2ng/ml to 2ng/ml. The very next cycle after Uttara Basti she got UPT(Urine Pregnany Test) Positive, later the USG scan was done and confirmed with pregnancy.

DISCUSSION

1. Discussion on Deepana Paachana:

Shodhana is contraindicated in Saamavastha, hence Niraamikarana is essential & it is the first step. The drug like Vaishvanarana Choorna does both Ama Paachana & Agni deepana.

2. Discussion on Koshta Shodhana:

Eranda Taila is best for ama nirharana, as it is having katu vipaka, ushna veerya which allivates vata kapha.

3. Discussion on Basti:

Thus Kashmari & Kutaja are one such combination, **Kashmari phala Kutaja Twak** Rasa-Tikta, Kashaya, Madhura Tikta kashaya rasa Guna - guru laghu ruksha guna Veerya-Sheeta Sheeta veerya vipaka-katu, katu vipaka Kashmari moola has ushna guna, used for Nirooha Basti.

Both Kashmari & Kutaja are having Stambhaka & Brimhana effect.The treatment plan here is Shodhana followed by Brimhana.

Kalka used was Shatapushpa choorna[8] and Sneha was Kashmaryadi Ghrita

- As the samprapti goes as avaranajanya dhatukshaya here deepana pachana, koshta shodhana and basti acts as avarana hara and Uttara Basti acts as Brimhana effect.
- Chemical constituent Tannine present in Kutaja has showed a result in higher fertility index in research conducted on female rats and Holarrhenine & holarrhetine also showed good effect on female infertility.
- As per modern – When lukewarm Kashmaryadi Ghrita is injected in uterine cavity, the blood flow in uters, fallopian tubes, ovaries increases, thereby it increases the exposure of follicle to gonadotropins and helps in increase in content of

FSH & LH receptors, this enhances the FSH & LH action within the follicle. Follicle development & maturation starts by enhancing the FSH, by which granulosa cells starts multiplying & starts increasing the size of follicles. From pre antral & antral follicles the AMH starts to secrete results in increasing of serum AMH level.

CONCLUSION:

- If the couple are not conceived within one year of unprotected coitus then the aim is to rule out the causes of infertility and accordingly treatment is followed.
- The treatment of infertility is challenging. There is profound development in the field of infertility. But the question of a simple, cost effective and proper protocol for the investigations and treatment still persists.
- Stree Vandyatwa is a Vata and Kapha dosha dominant disease and here as per Ayurvedic Science it is known that without the Vata dosha stree rogas will not be noticed.
- Vitiated Vata and Kapha both are mainly responsible for Artavanasha i.e. Abeejotsarga. About 40% women suffering from infertility due to issues in ovum can be considered under Beeja Dushti. (Most essential factor is Beeja, amongst four factors described by Acharya Sushruta).
- Basti may remove avarana kapha and might have restored the normal function of vata and helps in follicular development.
- As one of the samprapti is Dhatukshaya, to treat this, the treatment choosen was Uttara Basti, which acts as sthanika chikitsa by doing Brimhana.
- So, Kaala Basti followed by Uttara Basti with Kaashmaryadi Ghrita is effective in increasing the AMH, it may help in management of Stree Vandhyatva by increasing the quality and quantity of follicles or ovum.

BIBLIOGRAPHY

[1] Mahajan. N. Singh S.An overview of intrauterine insemination. In Mahajan N, editor. Infertility Management Series intrauterine Inseminatin. 1st ed. New Delhi; Jaypee Brothers Medical Publishers;2014.p.1-10

[2] Reichman DE, Goldschlag D, Rosenwks Z. Value of antimullerian hormone as a prognostic indicator of in *in vitro* fertilization outcome Fertil Steril 2014;101;1012-8

[3] Mahajan. N.Singh S.An overview of intrauterine insemination. In Mahajan N, editor. Infertility Management Series intrauterine Inseminatin.1st ed.New Delhi; Jaypee Brothers Medical Publishers;2014.p.1-10

[4] GynneruoAG, LindhadA, SorensenS.The role of anti mullerian harmone in female fertility and infertility –An overview; ActaObstetGynecolScand 2012;91;122-60

[5] Sushruta, Sushrutasamhita, Nibandhasangraha commentary of Sri Dalhana Acharya by; Kaviraj Ambikadutta shastri, Chaukambha Sanskrit rakashana, Varanasi,reprint-2018,chikitsa sthana 35/ 3-4 Pg no-702,PP-539

[6] Dr Nirmal Saxena, Vangasena Samhita, Varanasi, Chowkhamba Sanskrit Series,2004,Volume 2,Chapter No-73,Verse-120, Pg no-1327, PP-973

[7] Acharya Agnivesha, Charaka Samhita, Annotated by Charaka and redacted by Dridhabala with the Ayurveda Dipika Commentry of Chakrapani datta,edited by Viadhya Yadavji trikamji Acharya,Varanasi Chowkhamba Surabharati Prakashan 2020 Siddhi Sthana 1/25,Pg-738,PP-681

[8] Vruddajivakiya Tantra, Kashyapa Samhita, with Vidhyotini Hindi Teeka and Hindi translation of Sanskrit introduction by Shrisatyapal Bhishangacharya, Chaukamba Publication, Reprint 2008,Kalpasthana, 5th Chapter,Verse-5,6,10-13, 184/364