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A SINGLE CASE STUDY TO ASSESS THE OVULATORY EFFECT OF ASHWAGANDHA GHRITA IN MANAGEMENT OF VANDHYATVA WITH SPECIAL REFERENCE TO ANOVULATION.

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ABSTRACT -

INTRODUCTION –

The hurried and fast-paced lifestyle of today makes life exceedingly stressful, unhealthy, and unclean. As a result, Infertility is now recognized as a serious condition that has an impact on people's social and psychological well-being. Infertility is defined as failure to conceive after 1 year of regular unprotected coitus. According to WHO One in Six people worldwide are affected by infertility. In Ayurveda, this condition is termed as Vandhyatva. In Vandhyatva, four basic constituents of GarbhaSthapana are affected. They are Ritu (fertile period), Kshetra (helthyuterus and reproductive organs), Ambu (Proper nutrition) and Beeja (Streebeeja and Purushbeeja). When Streebeeja is mentioned, it refers to the discharged ovum from the ovary. Anovulation describes the failure to release the ovum from the follicle. Ovarian factor is thus one major cause of infertility. When it comes to modern science, for Anovulation, hormonal medicines are used which have lot of side effects.

In Ayurveda, Ashwagandha Ghrita is mentioned in Gad Nigraha, for management of Vandhyatva, which is cost effective and has no side effects.

अश्वगन्धाकषायेणमृव्दग्निपरिसाधितम् ।

ऋतुकालेपिबेव्दन्थ्यागर्भसन्धानकंघृत्तम् ॥ ग.नि.वन्थ्या ५

As per Gad Nigraha, it states that when Ashwagandha Ghrita is given to Vandhya Stree in Rutukal, she definitely conceives.

NEED OF STUDY-

Infertility has significant negative social impacts on the lives of infertile couples and particularly women frequently experience violence, divorce, social stigma, emotional stress, depression, anxiety and low self-esteem. For Infertility, modern medicine have treatments like hormones that have major side effects and treatments like IVF, ICSI are very costly. Hence, Ayurvedic medicine needs to be given which have no side effects and are not costly.

PREVALENCE -

The WHO estimates the overall prevalence of primary infertility in India to be between 3.9 to 16.8 per cent.

RESEARCH QUESTION –

Does Ashwagandha Ghrita have any ovulatory effect in the management of Vandhyatva with special reference to Anovulation?

<u>HYPOTHESIS</u> –

NULL HYPOTHESIS -

There is no significant ovulatory effect of Ashwagandha Ghrita in the management of Vandhyatva with special reference to Anovulation.

ALTERNATE HYPOTHESIS –

There is significant ovulatory effect of Ashwagandha Ghrita in the management of Vandhyatva with special reference to Anovulation.

<u>AIM – </u>

To study the ovulatory effect of Ashwagandha Ghrita in management of Vandhyatva with special reference to Anovulation.

OBJECTIVE -

To assess the ovulatory effect of Ashwagandha Ghrita in management of Vandhyatva with special reference to Anovulation.

STUDY DESIGN –

Single Case Experimental Clinical Trial

STUDY CENTRE -

Prasuti Tantra Stree Rog OPD at YMT Ayurved Medical College, Kharghar, Navi Mumbai

SAMPLING –

Single Case Study

OPERATIONAL DEFINITIONS –

INFERTILITY – It is defined as a failure to conceive within one or more years of regular unprotected coitus.

PRIMARY INFERTILITY - It denotes those patients who have never conceived.

OVULATION - It is process whereby a Secondary Oocyte is released from the ovary following rupture of a mature Graffian Follicle and becomes available for conception.

ANOVULATION - Anovulation is when ovaries do not release an oocyte during menstrual cycle.

CASE -

A 29 yr old female patient came to Prasuti Tantra Stree Rog OPD on 21/12/2021 with

C/O - willing for child since 4 years

scanty bleeding during menses since 1 yr

Past Medical Illness – No any H/O DM / HTN / Thyroid / Asthma / Koch's / or any

Past Surgical Illness – No any past surgical history

Family History – No any family history

Menstrual History –

- 1. Menarche at the age of 13 yrs
- 2. LMP 11/12/2021
- 3. LLMP 09/11/2021
- 4. Present Menstrual History 1-2 days / 30-32 days Regular/Scanty/Painless 1 pad/day
- 5. Past Menstrual History 5-6 days / 28 days Regular/Moderate/Painless 4 pads/day

Marital Status – married since 6 yrs

Coital History – 2 times per week

Contraception History – no any contraception used

Obstetric History – G0 P0 A0 L0 D0

PERSONAL HISTORY -

Thirst - normal

Apetite – normal

Bowel – once a day

Bladder -4-5 times a day

Sleep – disturbed

DIET HISTORY – mixed / mild spicy / irregular

ANY ALLERGY - nil

ANY ADDICTION - nil

EXAMINATION –

Weight – 61.5 kg

O/E –

GC fair

T-Afebrile

P - 82/min

BP - 120/70 mm Hg

S/E -

RS - Clear

CVS - S1 S2 normal

CNS - Well oriented, conscious

P/A - Soft

P/S –

Cervix –posterior in position, shape cylindrical, nulliparous, firm in consistency, normal in size, no erosion, no discharge

P/V –

Ut A/V/ SFM / Fx clear

PRAKRUTI – VataPitta

<u>PATHOLOGICAL INVESTIGATIONS</u> –

- Sr. FSH- 2nd day of Menses before and after treatment
- Sr. LH- 2nd day of Menses before and after treatment
- Sr. PRL -2nd day of Menses before and after treatment
- Sr. AMH -2nd day of Menses before and after treatment
- USG (Follicular study) from 8th day of Menses before and after treatment

MATERIAL AND METHODS-

MATERIAL -

DRUG REVIEW -

SR NO	DRUG	RASA	GUNA	VIRYA	VIPAKA	DOSHGHNATA	KARMA
1.	Ashwagandha	Tikta, Katu, Madhura	Laghu, Snigdha	Ushna	Madhura	Vatakaphaghna	Balya, Rasayana, Bruhana, Vajikaran
2.	Go Ghrita	Madhura	Guru, Snigdha	Sheeta	Madhura	Vatapitta hara	Rasayan, Virya Vruddhi

METHODS -

SR NO.	CONTENT	LATIN NAME	PARTS USED
1.	Ashwagandha	Withania	Moola
		somnifera	

PREPARATION OF DRUG .

Ashwagandha Ghrita was taken from the pharmacy of YMT Ayurvedic Hospital. The Ghrita was prepared according to the procedure mentioned in Sharandhara Samhita Madhyam Khand Sneha Kalpana.

DOSE OF DRUG –

Ashwagandha Ghrita 20 ml twice a day after food from fifth day of menses for twelve days for 3 cycles.

MODE OF ADMINISTRATION

Orally.

INFORMED CONSENT –

The patient was given study information, verbal and written, in her vernacular/understandable language about the purpose and nature of the study and an Informed written consent was taken.

C.R.F (Case Record Form) was prepared for this study.

RESULTS-

DATE	LMP	VISIT	COMPLAINS	TREATMENT	OBSERVATIONS
21/12/2021	11/12/2021	1 st visit	C/O – willing for child Scanty menses disturbed sleep	Not given, all reports seen and hormonal study advised	USG Follicular study showed – Anovulation
11/01/2022	09/01/2022	1 st Follow up	C/O – scanty menses Good sleep	Ashwagandha Ghrita 20 ml twice a day after food from fifth day of menses for twelve days.	FSH, LH, PRL, AMH in normal range
11/02/2022	07/02/2022	2 nd Follow up	C/O – menses flow good Good sleep	Ashwagandha Ghrita 20 ml twice a day after food from fifth day of menses for twelve days.	
09/03/2022	05/03/2022	3rd Follow up	C/O - menses flow good Good sleep	Ashwagandha Ghrita 20 ml twice a day after food from fifth day of menses for twelve days.	-
11/04/2022	04/04/2022	4th Follow up	C/O – menses flow good Good sleep	7.13	USG Follicular Study showed Ruptured Follicle
10/05/2022	-	5 th Follow up	C/O - nausea		UPT - positive

DISCUSSION –

Ashwagandha is Tikta, Katu, Madhura rasa with Laghu, Snigdha Guna and Madhura Vipaka causing VataKaphashamana. It has Balya, Rasayan, Bruhan, Vajikaran Karma. Ghrita has Madhura Rasa, Guru, Snigdha Gunas and Madhura Vipaka causing Vatapittashaman. It has Rasayan Karma. Vandhyatva is a Vata dominated Vyadhi. So, Ashwagandha ghrita overall causes Tridoshshaman. It has very good results in sexual disorder and it acts as a rejuvenator. It improves energy and also memory by enhancing the brain and nervous function, shows anxiolytic effects. In females it is used to treat Infertility, PCOS, reproductive system related problems. It also helps in Ovulation by balancing hormones in body.

The chemical constituents of Ashwagandha - Withania somnifera (WS) are alkaloids (isopelletierine, anaferine, cuseohygrine, anahygrine, etc.), steroidal lactones (withanolides, withaferins) and saponins.

Oxidative stress plays a vital role in the pathophysiology of female infertility. Oxidative stress induced reproductive impairments lead to altered ovulation patterns, oocyte maturation and steroidogenesis, each of which accelerates the natural process of apoptosis in granulosa cells. These conditions can lead to the development of polycystic

ovarian syndrome (PCOS), endometriosis, and unexplained infertility. Withaferin A, a constituent seen in Ashwagandha reduces oxidative stress in Infertility patients. Hence, we see Ovulation in such patients.

CONCLUSION –

In this case study, ovulation was seen when Ashwagandha Ghrita was used in Rutukal for 3 cycles eventually causing conception.

REPORTS -

BEFORE TREATMENT USG

AFTER TREATMENT USG





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शा.सं. मध्यम खण्ड स्नेह कल्पना २

10. कठिन द्रव्य जल प्रमाण ट्र

चतुर्गुणं मृदुद्रव्ये कठिनेऽष्टगुणं जलम । तथा च मध्यमे द्रव्ये दढ्यादष्टगुणं पयः ॥ अत्यन्तकठिने दृध्ये नीरं षोडशकं मतम ॥

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11. ऋतुस्तु द्वदशरात्रं भवति दृष्टार्तवः।

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