Infertility is a condition which can be defined as inability to conceive with minimum one year of unprotected sexual life. There may be good number of reasons for this condition to cause. Inability of couples to fulfill their desire of continuing the family has been a social stigma since ages. Due to increasing publicity and awareness and also educational status of couple making them easy to seek help for the conception. The causes for this condition are problems in female and male reproductive system in structure and physiological function, psychology of couple, genetic, environmental, immunological and sometime unexplained causes also may account for this condition. Vandyatwa is a condition where a female fails to conceive and also unable to continue pregnancy and give birth of a live baby and also unable to conceive in future. Ayurveda believes that the conception occurs only in Shudha Yoni.

**Methodology:** To review, analyse and interpret about female Infertility, its types, causes, Anovulation as one of the causes of infertility, its types, interpretation and Ayurvedic understanding of anovulation as a cause of Vandyatwa. The integral part of achieving Sreyasi Praja are Gārbhasambhava Samagri which includes Ritu, Kshetra, Ambu, Beeja. As there are many causes for Vandyatwa mentioned, in this study Vandyatwa due to Arthava Nasha or Nastartva is considered where Arthava is taken as ovum. **Discussion**- Infertility is observed in approximately 10-15% of couples of reproductive age. Ovulation disorders account for about 30-40% of female infertility and about 20% of infertility couple. Anovulation is caused due to the defect in the function of hypothalamus -pituitary- ovarian axis. Arthava is considered as ovum and it is formed as a Upadhatu after the proper digestion of Ahara Rasa by Prakrutha Agni. If Agni is disturbed by Ahita Ahara vihara formation of Rasadi Dhatu there by Arthava is also affected causing Nastartva which can be considered as anovulation. The condition Nastartva also can be managed by Deepana pachana and Arthava Janaka which is the line of management to correct the Samprapti and to restore fertility. Many Yogas are mentioned by our Acharyas, & Pipplayadi Yoga which contains Trikatu and Nagakeshara is one among them mentioned in Bhaishajya Ratnavali Yonivyapath chikitsa for Vandyatwa.

**INTRODUCTION**

Infertility is a condition in which even after having regular unprotected sexual intercourse for more than one year, the couple is unable to conceive. Infertility can be classified as - **Primary infertility:** females who never conceived in spite of regular unprotected coitus and Secondary.

**Infertility:** Inability of female to get pregnant subsequently even after having previous successful conceptions. Among Healthy couples, some females get conceive within one menstrual cycle is defined as fecundability.

**Incidence and Prevalence:** There are increasing numbers of infertility cases since last decades. The fertility rate is getting deteriorated. According to data mention by WHO which explains there are as many as 60-80 million of couple are infertile in the world. Many couples unable to conceive even though not having any specific causative factor comes under unexplained infertility. With regular unprotected coitus some 80 percent of couples are able to conceive within one
year. Remaining couples may get conceive by the end of second year. **Vandyatwa**: Vandyatwa is a condition where the female is unable to conceive even after unprotected intercourse. In woman whom the Garbhadhaarana marga is blocked she is called as Vandya. The word Vandh is derived from the root "Vandr “Yak”, which is meaning sterile, un-fruitful waste. The Classification of Vandyatwa has been mentioned in Haritha Samhita, Rasa Ratna Sambuchaya and Vandhya Kalpa Druma.

**Acharya Charaka** [1] - has mentioned in the aetiology the word -Sapraja in the clinical features of Asruja Yonivyapath the word - Apraja. [2] Under congenital abnormalities the word- Vandhya.

**Harita Samhita**: The classification of Vandhya is as follows- [3]

**Causes of Infertility**

| Causes                  | Percentage (%)                                                                 |
|-------------------------|-------------------------------------------------------------------------------|
| Male                    | 35% of cases due to male factor includes sperm morphological abnormalities, motility, sperm count. |
| Ovulatory               | 40% of cases due to anovulation, luteal phases difficult.                      |
| Tubal                   | 40% of cases due to tubal factors includes tubal scarring, defect in ciliary movements, tubal adhesion. |
| Other                   | 10% of cases due to cervical causes uterine factors.                          |
| Unexplained             | Remaining 10% includes under unexplained infertility.                         |

**Vandhyatwa Nidana**: Before discussing the Nidanas of infertility, need to know the essential factors for conception. Abnormalities in these factors may lead to Vandyatwa. [5]

Acharya Sushruta has mentioned this under the heading of Garbha sambhava samagri.[6]

**Ritu, Khestra, Ambu, Beeja** are considered as the four essential factors for the conception. Along with these **Vaghbhatacharya** adds Unvitated Anila and Hridaya as the essential factors for the birth of progeny with all desired qualities.

**Causative Factors in Females** [7]

| Table 2: Cause of infertility in female                  |
|----------------------------------------------------------|
| Ovulation dysfunction (30-40%)                           |
| Tubal dysfunction (25-35%)                               |
| Uterine abnormalities (10%)                              |
| Cervical abnormalities (5%)                              |
| Vaginal Factors                                          |
| Oligoovulation, Anovulation, Corpus luteum deficiency    |
| Tubal block may be due to infection, pelvic adhesions etc.|
| Thin endometrium, endometritis, uterine fibroids, Synchieas, congenital abnormalities |
| Cervicitis, cervical polyps, cervical erosion, cervical malignancy |
| Vaginal atresia, vaginal septum, Narrow introts, Vaginitis and purulent discharge |

Functional disarrangement of ovary is the major cause for infertility.

**WHO classifies Ovarian dysfunction into seven main groups (who 1976)**[8] Group 1: Complete absence of function of Hypothalamic –Pituitary axis?

Group 2: partial dysfunction of Hypothalamic – pituitary axis. Group 3: Ovarian failure – loss of follicular activity. Group 4: Congenital or Acquired female reproductive tract abnormalities. Group 5: Pituitary tumours causes hyperprolactinaemia. It is coined as lesion in the Hypothalamus-pituitary region due to space occupancy. Group 6: Hyperprolactinaemia without any tumours is coined as a lesion in the Hypothalamus-pituitary region without any space occupancy. Group 7: Amenorrhea with any tumour or mass is coined lesion in the Hypothalamo-pituitary region with space occupancy.
Ovarian steroidogenesis

The normal functioning ovary synthesizes and secretes the sex steroid hormones—estrogens, androgens and progesterone, in a precisely controlled pattern determined in part by the pituitary gonadotrophins, FSH and LH the most important secretory products of ovarian steroid biosynthesis are progesterone and estradiol however, the ovary also secretes quantities of estrone, androstenedione, testosterone, and 17-hydroxyprogesterone. Sex steroid hormones play an important role in the menstrual cycle by the preparing the uterus for implantation of the fertilized ovum. If implantation does not occur, ovarian steroidogenesis declines the endometrium degenerates and menstruation ensues.

Anovulation: Anovulation is a common cause for female infertility in today’s generation. In anovulatory condition though their serum FSH concentration is normal, menstruation will be irregular and excessive as endometrium is proliferated under influence of oestrogen and there is no progesterone synthesis. The endometrium is shed by sudden withdrawal of oestrogen and there is excessive and irregular shedding of endometrium. But their serum FSH concentration will be normal. Anovulation means absence of ovulation. It is characterized as menstrual bleeding without preceding ovulation and followed by corpus luteum formation. Conditions essential for ovulation to occurs normally are – Hypothalamic pituitary ovarian axis must be intact with pulsatile secretion of GnRH. Ovarian hormones must have good response at their respective target organs. Positive and Negative feedback signals to be properly active. Any abnormalities in above factors results in anovulation.

Types of Anovulation
- Primary Anovulation: If a woman has never ovulated it is said to be primary anovulation.
- Secondary Anovulation: Suspension of ovulation secondary to some other illness is considered as secondary anovulation.

Pathophysiology of Anovulation

Follicular growth is independent till it attains the size of 2-5 mm. after that follicles are recruited by follicle stimulating hormone. During menstrual phase and even prior to it, due to absence of negative feedback of oestrogen, progesterone and inhibit, anterior pituitary secretes FSH. FSH is responsible for follicular growth, helps in maintaining follicular microenvironment oestrogen dominant rather than androgen, which is essential for continuous follicular growth and development into dominant follicle. Further FSH induces receptors for LH activity in granulosa cells which is needed for ovulation and luteinisation process. The factors responsible for ovulation are LH surge. Before this there is oestradiol surge which initiates ovulation. LH surge is essential for triggering of ovulation and follicular rupture about 36 hours after the surge. Other functions are disruption of cumulus oocyte complex, induction of the resumption of oocyte meiotic maturation and luteinisation of granulosa cells. Following ovulation there is formation of the corpus luteum, increasing concentration of progesterone slow down the frequency of the LH pulses. Luteal phase is constant in each menstrual cycle i.e. 14 days, during which FSH and LH levels are low. After luteal phase, corpus luteum gets degenerated, progesterone levels fall. Again, FSH increases to recruit follicles for next menstrual cycle. The coordination between the follicle and hypothalamic pituitary ovarian axis and all gonadotropins those are FSH, LH, gonadal steroids oestrogen inhibin is responsible for ovulation. This recycling mechanism is regulated by substance functioning as classic hormones (FSH, LH, oestradiol and inhibin) transmitting messages between the ovary and the hypothalamic-pituitary axis and autocrine/paracrine factors, which co-ordinate sequential activities within the follicle designated to ovulate. Due to improper response to stimulus, improper function of IGF-2, inhibin and activin causes dysfunction of follicular receptor activity within the ovary.

Among Garbhasambhava Samagri, Beeja is considered as one of the important factors for achieving Sreyas praja. Here Beeja is considered as male and female gametes. In female Artava is essential for fertilization. स्त्रीणाम् गाभोपचारनी स्वदेशं सर्वसमस्तं। Here Artava refers to Strī beeja (ovum). The type of Ankura depends on type of Beeja. योनिः तुष्टे बीजं शुभेयं सर्वसमस्तं। तात्प्राप्ति तत्सिं बीजं स्वंविभिर्मुष। For achievement of conception healthy oocyte and spermatozoa are essential. शुद्धं युक्तात्मकं स्वस्थं सर्वं मिथुनं मिथ। (AH Sh.1/18 Arunadatta)

Importance Beeja in conception: In Manusmriti it is mentioned that the Beeja is more important than the Kshetra as the progeny will possesses. The qualities of Beeja embedded and not that of the field. The Beeja formed by the Soumya bhava of the Rasa gets Agneyatwa after undergoing Dhatu paaka by the influence of Pitta, ‘आग्नेरं आशुकं।’ Any abnormalities in Beeja, Beejabhaga, Beejabhagavayava results in genetic abnormalities in the progeny, Abeejatha or anovulation may be one of such pathology which could be genetic inherent. Under Twenty Yoniyapath all most all of the gynaecological diseases are included. if they are not treated properly cause infertility (Abeejatha). Few of the Yoniyapads cause infertility either primary or secondary if not treated.
Table 3: Yoni Vyapaths Related to Anovulation

| Yoni vyapat     | Interpretation                                                                                                                                                                                                                   |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Asruja Yonivyapath | A clinical condition with bleeding per vagina during early pregnancy leading to early pregnancy loss. This can be taken as secondary infertility due to implantation defect.                                                               |
| Vamini Yonivya Path | The feature of this Yonivyapads is the expulsion of Beeja or Shukra with Arthava from the Garbhashaya Mukha by sixth day or seventh days after the entry of Shukra into the Yoni. Here may be due to Luteal phase defect implantation failure leaving the female infertile. |
| Putragni Yonivyapad | This condition is repeated abortion due to Arthava dosha.                                                                                                                                                                        |
| Shandi Yonivyapath | It is a congenital abnormal condition where the lady will not menstruate. This is due to Beeja Dosha. Over all in as the major Dosha involved in the pathogenesis of Yonivyapath, as Upadrava the vitiated yoni will not accept the Beeja and the female with such yoni becomes infertile. |
| Aticharana Yoni Yyapada | Acharya Sushruta says that this disease is caused by excessive coitus. The woman does not achieve conception. Charaka and Vagbhatta have described it to be Vataja, while Sushruta due to Kaphaja. In the initial stage, due to intense sexual desire, the woman may feel vaginal itching and due to repeated coitus may have excessive mucoid unctuous secretion from cervical and endometrial glands, which are the clinical features of Kapha as explained by Sushruta. Bhavaprakasha has explained that in this condition the woman discharges Raja before the ejaculation of male partner. It can be taken as vaginitis due to excessive coitus associated with infertility. |

Cause for failure conception during these days:
As the day’s proceeds after the Rutukaala, the Garbhashaya Mukha becomes Sankocha and prevents the entry of Shukra just like the bloomed lotus closes as sun sets. Same way the sperm deposited after the ovulatory period will be fruitless as the cervix will be constricted during this period.

**Time in relation to ovulation and conception:**
Ovulation occurs approximately after 16 to 24 hours of LH surge hence 12 to 16 days after Arthav Chakra is considered as fertile period the ovum can survive 72 hours after ovulation and sperm can survive for 72 hours in female genital tract. Hence, we can say that fertile period will be of 120 hours same way spermatogenesis takes 60 to 63 days to complete and capacitation of sperm happens in 2 to 6 hours after it reaches the ovum.

Various methods used to detect ovulation are grouped mainly as follows

**Diagnosis of Ovulation**

- **Indirect**
  - History taking
  - Peripheral changes
    - BBT
    - Cervical mucus study
    - Vaginal cytology
    - Hormone assay
    - Endometrial biopsy
    - Follicular study

- **Direct**
  - Laparoscopy

- **Conclusive**
  - Pregnancy

**Figure 1: Diagnosis of Ovulation**

**The role of physician in management of infertility**
One should do workouts of the infertility case with these goals.
1. Proper evaluation and correction of causes.
2. To provide proper information to couple
3. To provide emotional support

**Counseling the Couple**
The infertility management includes the patient assessment, counseling and management[11]. The steps start with

Available online at: [http://ijapr.in](http://ijapr.in)
1. History
2. Inspection
3. Interrogation
4. Clinical examination – general and gynaecological
5. Investigation

Couple Instructions\(^\text{[12]}\)

**Assurance:** The infertile couple remain psychologically disturbed right from the beginning, more so as the investigation progresses. The couple in such cases should be sensitively handled to minimize psychological upset. When minor defects are detected in both the husband and the wife, each of which individually cannot cause infertility but in combination, they significantly decrease the fertility potential. As such, the faults should be simultaneously treated and not one after the other. Even when a gross abnormality is detected and the prospect of pregnancy is bleak, an optimistic discussion is worth rewarding.

**Body weight:** Overweight or underweight of any partner should be treated, to obtain an optimum weight. Body mass index of 20–24 is optimum.

**Smoking and alcohol:** Excess smoking or alcohol consumption has to be avoided.

**Coital problems:** The coital problems should be carefully evaluated by intelligent interrogation. Advice to have intercourse during the mid cycle too often gives the result even prior to investigation. Using LH test kit, one can detect LH surge in urine by getting a deep blue color of dipstick. The test should be performed everyday between day 12 and day 16 of a regular cycle. Timed intercourse over 24-36 hours after the color change reasonably succeeds in conception. Minor psychosexual problems should be dealt with accordingly.

Ovarian dysfunction is the most common indication for the ovulation induction. These agents can also be used in ovulatory women to increase the likelihood of pregnancy in couples with other causes of infertility or unexplained infertility. Use of these medications to promote follicular development and prompt ovulation is called super ovulation or ovulation enhancement. If these agents are administered solely to stimulate follicles, and egg harvesting is completed by ART, then the term controlled ovarian hyper stimulation is used. In contrast, we prefer the term super ovulation induction to describe treatment with medications to stimulate normal ovulation in women with ovarian dysfunction. Frequent causes of ovarian dysfunction include PCOS and diminished ovarian reserve. Less often, central (hypothalamic or pituitary) disorders or thyroid dysfunction can result in infertility. Rarely, ovarian tumors or adrenal abnormalities lead to abnormal ovarian function. Treatment of ovarian dysfunction should be based on the identified cause as well as the results of any prior attempted therapy, the common drug used for induction of ovulation is Clomiphene Citrate.

**Nidana for Vandyatwa due to Abeejatha-Anovulation:** We get scattered references available for anovulation as Beejopaghata, Pushpopaghata and Abeejatva.

1. **Nastartva:** Due to Aharaja and Viharaja Nidanas Vata gets aggravated and causes “Rasa Dhatu-Kshaya” Because of this Dhatu Kshaya, which causes the Kshaya of its Upadhatu Beeja rupi arthava as well as Masanumasika srava rupi arthava. it means there will be anovulation and menstrual irregularity.

2. **Artavavaha Stroto Vighata:** \(^\text{[13]}\) Anuloma gati of Vata is responsible for ovulation. Any trauma/injury to the ovaries or ovarian blood vessels causes vitiation of Vata followed by Sangha and Upadhatu kshaya. Arthava Nasha is caused by vitiated Vata and further causing Arthava-Nasha.

3. **Revati Jataharini (Pushpaghni):** \(^\text{[14]}\) According to Acharya Kashyapa the women with regular menstrual cycle are called as Pushpagani. But is without the Beeja rupi pushpa. Along with this the lady also will have Lomasha ganda and Sthula. The cause of initiation of this Jataharini is Adharma in indulging diet as well as life style along with psychological disturbances. This causes Sanga in the Srotas that turns into Vikriti like anovulation. Therefore, it can be considered as a Sanga Pradhanika vikara.

4. **Avarana:** \(^\text{[15]}\) The Prakupita Kapha due to its Nidana does the Avarana of Apana vata leading to different pathogenesis like loss of function like Artava nishkramana kriya and also Beeja rupi arthava Nirmana.

5. **Vandhya Yoni Vyapada** \(^\text{[16]}\): According to Sushruta arthava can be considered as ovum and anovulatory cycles can be considered as Vandhya yoni vyapat. All yoni vyapat is caused due to vitiation of Vata.

6. **Use of Tikshna Virechana in Mridukostha:** According to Acharya Kashyapa, if Teekshna Virechana is given in Mridukostha woman, Vata gets aggravated and causes Beejopaghata.\(^\text{[17]}\) Due to vitiation of Apana Vayu, it prevents the rupture of ovarian follicle causing Beejopaghata.

7. **Beejadushti:** During Garbhavastha, if mother takes Vata Prakupita Ahara and practices Vata Prakopa Vihara and the female fetus is affected with vitiated Vayu then her Beeja, Beejabhaga and Beejabhaga avayava can be vitiated and can manifest congenital abnormalities in female reproductive organs. \(^\text{[18]}\)

8. **Dietetic Habit:** Due to consumption of junk foods and following improper dietary habits the Beeja may get vitiated.\(^\text{[19]}\) Following the abnormal dietary habits like Vishamashana, Adhyashana, Anashana, Viruddha annapana causes Agnivaishamya and Rasadushti leads
to *Artava Dushti* ends with *Beeja Rupi Artava Dushti* in the form of Anovulation.

**Purvarupa:** There is no description of premonitory symptoms i.e., Purvarooopa of Vandyaatwa in any of our classical textbooks by our Acharyas. Acharya Kashyapa has mentioned Vandhya yoni in the description of Vataja-nanatmaja vyaadhi.

**Rupa:** “Vandhya Nastartva vidyat”. A woman, in whom Artava has been destroyed, is termed as Vandhya. [20]

**Probable Samprapti:** Due to various aharaja, Viharaja and Manasika Nidanas, Agnimandya is results by afflicting Samana vata, Pachakagni leading to Kapha Dushti in turn to Ama, thereby causing Rasadushti. Hence the formation of Upadhatu Artava effected leading to Nastartva causing Vandya. They can also be understood at other level that Dhatvagni mandhya in Rasavaha Srotus leading to Artava dushti leading to Vandyaatwa.

**Samprapti Ghatakas**

- **Dosa:** Vata Prachanda tridosha
- **Dushya:** Rasa, Rakta, Artavava
- **Srotas:** Rasavaha, Artavavavaha
- **Srotodushti:** Sanga
- **Udbhavasthana:** Amashaya, Pakvashaya
- **Sanchara sthana:** Sarva shareera
- **Vyaktasthana:** Phalasrotus
- **Rogamarga:** Abhyantara
- **Sadya sadhyata:** Kirchra Sadhya

**Management of Vandyaatwa**

In classics Acharyas have described Nidana and Chikitsa for Vandyaatwa at different contexts. The treatment has been given according to the causative factors. The Vandyaatwa chikitsa includes- treating the underlying pathological condition of infertility, Avoiding the etiological factors (Nidana parivarjana), basic treatment methods of Vandyaatwa by Garbhaprada yogas, following regimens indicated in Garbaadhana

1) **Nidana Parivarjana-Samskhepataha kriyayogo nidanasya parivarjanaam** (su.u.1/25)

Infertility is a condition caused by different etiological factors. Identifying those causes and strictly avoiding them is the first and foremost thing in the treatment.

2) **Treating the Underlying Pathology** - The pathology should be identified and treated accordingly

3) **Treatment for Arthava Doshha**[21]

   a. Panchakarma- Doshanusara vamanadi prayoga
   b. Sthanika chikitsa- Kalka, Pichu, Yoni prakshalana
   c. Shukradoshahara chikitsa- Rasayana, Vajeekarana, Mutra roga hara dravyas

- **Treatment for Yoniyapadhi**[22] After proper Purvakarma, Panchakarma chikitsa should be given. As Vata is the prime cause for Yoniyapath, without Vata vitiation no Yonirogas will manifest, that should be controlled well. Application of Lavana taila, Swedana with Pinda sweda and Kumbhika sweda, Parisheka with Sukhoshna jala, Vatahara ahara and according to the condition after Shodhana uttarabasti can be administered.

- **Treatment of Anartava**[23] In a condition of Artava nasha, Acharya kashyapa mentioned use of Shatavari – shatapushpa. By use of this Vandhya or even Shanda can get a son.

4) **Regimens Indicated in Garbhadhana**

   As Purvasamyoga vidhi some regimens are told, i.e., Shodhana, maintenance of Sadhvrutta, avoiding negative emotions.[24] By proper purification and Samskara yoni, Garbhashaya, Beeja and Manas will remain unvitiated and are ensured leading to healthy pregnancy by perfect unification of Beeja.[25]

**Panchakarmas In Vandyaatva**[26]

The infertile women should be prescribed Vamana, Virechana and Asthapana bastis by which she conceives.

1) **Vamana**-Given for Kapha dosha nirhama, Vamana does the Soumya Dhatu Shamana and ignites the Agni dhatus in the body which helps in Pitta vrdhdi and intern increases the quantity and quality of Arthava in the Stree.

2) **Virechana**- Acc to Kashyapa Samhita for Akarmanya Beeja which is considered as anovulation, Virechana is considered as the best treatment.

3) **Basti**

   - Niruha basti is considered as Amrutha for an infertile woman.
   - Anuvasana basti is an ideal treatment in Beeja Doshha sambandhi Vandyaatva Yapana basti is very ideal in Stree vandyaatva.
   - In cases of Beeja Doshha Vandyaatwa, like Alpa dosha, Asta arthava and Nasta Beeja Anuvasana Vasti is ideal.
   - Yapana basti performs both the Niruha basti and Anuvasana basti which does both Snehana and Shodha karma.

4) **Nasya:** The medications administered through the nasal route reaches the Shiras and helps in pulsatile action of Gonadotrophin releasing hormones and promotes the ovulation. Thus helping in treatment of infertility.

   Ashwagandha siddha ksheerapaka every day in morning hours after Rutu snana Lakshmana mula uprooted in Pushya nakshatra, pounded with milk Lakshmana kalka with ghee or milk for Nasya.


**Other Yogas**

Narayana Taila, Shattavi Taila, Phala Ghrita, Lasuna Ghrita, Shattavi Ghrita, Kalyanaka ghrita, Kushmanda avaleha.

**Prajasthapan Gana-Indri** (Citrullus colocynthis), Brahmi (Bacopa monneiri), Shattavi (Cynodon dactylon), Sahasraparni (Cynodon sp), Amogh (Sterispermum suaveolens), Ayvatha (Musa paradisica), Shiva (Terminalia chebula), Arishtha (Picrorhiza kurroa), Vatipushpi (Sida cordifolia), Vishvasenakanta (Callicarpa macrophylla) Ch.Su. 4/49.

Charaka mentions Prajasthapan Gana. These 10 drugs have the quality of achieving conception and combat infertility.

**Pippalyadi Yoga:** Physicochemical analysis and HPTLC of Pippalyadi yoga provides substantial information for the proper identification, authenticity, quality and purity of the final product/drug. On the basis of observations made and results of study, this study may be beneficial for future researchers and can be used as a reference standard in the further quality control researches.

**DISCUSSION**

Infertility is a problem related to inability of conception due to various causes. Ovarian dysfunction is one among them. Anovulation is a condition which explains the failure of ovulation due to the dysfunction of hypothalamus-pituitary-ovarian axis. Artava is considered as Stri Beeja (ovum) as far as the conception is concern and Nastartva, the condition without Artava can be considered as anovulation. Nastartava is one type of Artava vikara the result of which is responsible for Asambhava of Prajotpadana i.e., Vandyatva. Clinically anovulation is treated with different ovulation induction drugs. The side effects like ovarian hyper stimulation, early pregnancy loss, multiple pregnancies of conventionally practiced ovulation induction drugs necessitate the need of other alternate safe treatment with no side effects. For the management of Vandyatva there are good numbers of formulations and treatment modalities mentioned in Ayurvedic classics and are well tested, tried and trusted. Pippalyadi Yoga is one such combination with Trikatu and Nagakeshara churna in equal quantity to be consumed with Ghrita mentioned in Bhaishajya Ratnavali Stri rogadhiakaara in the treatment of Vandyatva.

Infertility is observed in approximately 10-15% of couples of reproductive age (speroff et al1999). Ovulation disorders account for about 30-40% of female infertility and about 20% of infertility couple (Berna Gunea Suruhan et al) Anovulation is caused due to the defect in the function of hypothalamus - pituitary- ovarian axis. Artava is considered as ovum and it is formed as a Upadhatu after the proper digestion of Ahara rasa by Prakruta Agni. If Agni is disturbed by Ahita ahara vihara formation of Rasadi dhatu there by Artava is also affected causing Nastartava which can be considered as anovulation. Different ovulation induction drugs are in clinical use to treat the anovulation.

**CONCLUSION**

The condition Nastartava also can be managed by Deepana pachana and Artava Janaka line of management to correct the Samprapti and to restore fertility.

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