CLINICAL STUDY TO EVALUATE THE EFFICACY OF AGNIKARMA IN KARNINI WITH SPECIAL REFERENCE TO CERVICAL EROSION

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ABSTRACT

Women’s health is extremely valuable and source of healthy nation. There are so many diseases that affects quality of life of women; cervical erosion is one among them. On the basis of etiopathogenesis, clinical features, complications and principles of treatment; Karnini Yoniyapad is very near to cervical erosion. ‘Karnini Yoniyapada’ is a disease caused by vitiation of Vata and Kapha dosha while affected dhatu is Rakta. Treatment is aimed at Vata-Kaphashamaka and Raktashodhaka. In cervical erosion, there is replacement of squamous epithelium of ectocervix by columnar epithelium of endo cervical canal. Although it is a benign condition but ignorance of this disease may lead to infertility and cervical malignancy. The treatment of cervical erosion is designed to destruct the columnar epithelium and to promote the re-epithelialization of the squamous tissues. Electric cauterization and laser are the standard treatment modalities of erosion in modern medical science which are the modified form of Agnikarma but so many side effect associated with them. In the present study, the management of cervical erosion was done through Agnikarma by Jamabbadan shalaka and found as better alternative in the management of Karnini (Cervical erosion).

KEYWORDS: Cervical Erosion, Karnini Yoniyapada, Agnikarma.

INTRODUCTION

Women’s health is extremely valuable and source of healthy nation. There are so many diseases that affects quality of life of women; cervical erosion is one among them. In cervical erosion, there is replacement of squamous epithelium of ecto cervix by columnar epithelium of endo cervical canal. This disease may not be life threatening but may be troublesome and irritating to the individual in her routine activity. Moreover when this condition is neglected, may lead to serious complications or turn into major life threatening condition. This is a common gynecological disease and seen in about 85% of women.

In Ayurveda classics almost all of the gynecological disorders are described under the heading of Yoniyapad which are twenty in numbers. Karnini Yoniyapad is one among them, the description of which seems to be near to cervical erosion. According to Acharya Charaka, due to straining during labor in the absence of labor pains, the Vayu gets obstructed by fetus with holding kapha and getting mixed with Rakta produces Karnika in Yoni, which obstruct the passage of Rakta (raja). Due to presence of Karnika this condition is termed as Karnini[3]. Acharya Susruta says that vitiated Kapha along with Rakta produces Karnika in Yoni. Other features of vitiation of Kapha i.e., unctuousness and itching etc. are also present[4]. After indulging into specific diet and life-style Vata (Apanavayu) gets vitiated and there by Kha-vaigunya takes place in the Artavahastrotas. The same vitiated Vata gets mixed with Kapha dosha and Raktabhedhernyam presents with Doshasangharmachashaka takes place. Adhisthana of disease is the Garbhashayadvaramukha i.e., cervix. In the stage of Vyaktaavashta, Karnika is formed in the Garbhshayadvaramukha, which is the cardinal symptom of Karnini yoniyapad. Karnika is mentioned as Granthi[5] Mansakandak[6], Mansankur[7], Mansakandakar Granthi[8]. Incidence in females, restriction to genital tract, presentation of unique symptoms, more than anything identical appearance of the lesion with elevation impressively resemblance of cervical erosion with Karnini yoniyapad.
Nowadays Agnikarma is practiced by the modern physician in same or other form like cauterization, Laser etc., which are nothing but only the modified form of Agnikarma. They have their own side effect like in cervical erosion excessive vaginal discharge, secondary infertility, bleeding per vagina, infection, stenosis etc. are the side effects of electric cautery. This may further destroy the healthy tissues, therefore we can rely upon Ayurveda management incorporating Agnikarma by Shalaka which is comparatively much safer because in Agnikarma, instead of destruction of tissue, scrapping of unhealthy tissue done and hence chances of cervical stenosis etc. is almost nil.

Need of the Study

Cervical erosion is a common condition seen in most woman of all the age groups. Its prevalence is between 50-85% of all the gynecological conditions. Cervical erosion is the commonest cause of white discharge and bleeding per vagina after coitus. This leads to psychological problem in the female and also affects her health, and hence it is a major problem in front of gynecologists. Since long time specific therapies like diathermy cautery, cryosurgery are advised and some topical applications also available in the existing modern system of medicine. But none of these therapies are satisfactory in curing the cervical erosion and are occasionally causing side effects like excessive vaginal discharges. It is a benign condition but if left untreated may leads up to infertility and predisposes to cervical malignancy. That’s why it is important to pay attention toward this troublesome disease and to detect these lesions early enough and treat them adequately. This disease often associated with cervicitis and viral infection. When these condition are present together they will show oncogenic potency. Hence it is highly essential to develop an accurate therapy for erosion in the present circumstances.

Materials and Methods

Clinical study

Total 15 clinically diagnosed and confirmed cases of cervical erosion were selected from the O.P.D / I.P.D. N.I.A. Hospital, Jaipur after taking informed consent.

Inclusion Criteria: Clinically diagnosed patients of cervical erosion (Karnini) on per speculum examination, irrespective of symptoms.

❖ Married women irrespective of parity.
❖ Age between 20 to 45 years.

Exclusion Criteria: Pregnant women having cervical erosion

❖ Women of age less than 20 and more than 45 years
❖ Positive patients of Human Immunodeficiency Virus, VDRL and Hbs Ag
❖ Patients with Intra Uterine Contraceptive Device insertion or on Oral contraceptive pills.
❖ Any organic pathology of reproductive tract like endometrial cancer, cervical cancer, cervical intraepithelial neoplasia.
❖ Patient having severe systemic disorders like Diabetes, Hypertension, Tuberculosis etc.
❖ Patients with Menorrhagia, Metrorrhagia and Polymenorrhoea.

Withdrawal Criteria

1. If any serious condition develops during the course of trial which requires urgent treatment.
2. Patients herself wants to withdraw from the clinical trial
3. 100 percent non-compliance
4. Patient who do not come to regular follow up.

Laboratory Investigations

Before treatment

1. Complete Blood Count-Erythrocyte Sedimentation Rate, Random Blood Sugar, Bleeding Time, Clotting Time, Liver Function Test (Serum Bilirubin, Serum Alkaline Phosphatase, SGOT, SGPT), Renal Function Test (Serum creatinine, Blood Urea).
2. Complete urine examination-Routine & Microscopic.
3. Monteux test (in case of raised ESR).
4. Human Immunodeficiency Virus, VDRL, HbsAg.
5. Vaginal swab culture
6. Cytological examination from cervical smear (Pap smear).
7. Colposcopy (If required)

Assessment criteria: A special scoring pattern was applied in symptoms and associated complaints.
Subjective Parameters

| Parameter                        | Gradation |
|---------------------------------|-----------|
| **Amount of vaginal discharge** |           |
| Normal (no c/o discharge)       | 0         |
| Mild - Occasional (slight wetting of under garments on/off) | 1         |
| Moderate - moderate wetting of under garments | 2         |
| Severe - Excessive outpouring discharges from vagina | 3         |
| **Low backache**                 |           |
| Absent                           | 0         |
| Mild - Occasional (no interference with daily routine) | 1         |
| Moderate - Backache during any effort and forward bending (interference with daily routine and relief after taking medicine) | 2         |
| Severe- Excessive (affect daily routine, no relief taking medicine) | 3         |
| **Dyspareunia**                  |           |
| Absent                           | 0         |
| Mild Pain during coitus          | 1         |
| Moderate Pain during forceful coitus | 2         |
| Severe pain - Patient tries to avoid marital relationship | 3         |
| **Pruritus vulvae**              |           |
| Absent                           | 0         |
| Mild - Occasional                | 1         |
| Moderate - Disturb daily routine/ increase after specific time like menstruation, micturation etc. | 2         |
| Severe - Intolerable itching (affects routine activity) | 3         |
| **Post coital bleeding**         |           |
| Absent                           | 0         |
| Mild- only spotting              | 1         |
| Moderate- blood stained mucous discharge | 2         |
| Severe- fresh blood discharge    | 3         |

Objective Parameters

| Extent of erosion                | Gradation |
|---------------------------------|-----------|
| Complete healing of erosion     | 0         |
| Erosion covering less than 25% area of cervix | 1         |
| Erosion covering 26 to 50% area of cervix | 2         |
| Erosion covering 51 to 75 % area of cervix | 3         |

Management

**Poorvakarma** - Before going for Agnikarma proper assessment was done. Before doing the procedure fully explained about the procedure and written consent was taken from the patient and attendant. Instruments required for Agnikarma like Shalaka and Plota, Pichu, Grita, Madhu, source of Agni were kept ready. Pichhilaanna was given before the procedure.

**Pradhankarma** - Before performing Agnikarma chanting of mantras was done. Minutely examine the site where Agnikarma has to be performed. Proper cleaning of the area was done. Agnikarma was performed by Jamabbadanshalaka at the site until Samyak dagdha lakshana appears. 

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**Results**

Various observations made and results obtained were computed statistically using, Wilcoxon matched-pairs signed-ranks test by using Graphpad-instat 3 software to find out the significance of the values obtained and various conclusions were drawn accordingly.

**Table 1: Shows the pattern of clinical recovery in various subjective parameters of cervical erosion in 15 patients treated with Agnikarma with Shalaka**

| Symptoms                  | Mean BT | Mean AT | Mean Diff | % Relief | SD±  | SE±  | W    | p value | Result |
|---------------------------|---------|---------|-----------|----------|------|------|------|---------|--------|
| Vaginal Discharge         | 2.333   | 1.133   | 1.2       | 51.43    | 0.564| 0.1456| 91   | 0.0002  | ES     |
| Low Backache              | 2.067   | 0.7333  | 1.334     | 64.53    | 0.6962| 0.1798| 91   | 0.0002  | ES     |
| Dyspareunia               | 1.4     | 0.6667  | 0.7333    | 52.38    | 0.9224| 0.2382| 55   | 0.002   | VS     |
| Pruritus vulvae           | 0.8     | 0.3333  | 0.4667    | 58.33    | 0.751 | 0.194 | 21   | 0.0313  | S      |
| Post Coital Bleeding      | 0.2     | 0.0667  | 0.1333    | 66.65    | 0.3361| 0.0868| 3    | 0.5     | NS     |
DISCUSSION

All the patients were observed for relief in symptoms and changes in cervix. Vaginal discharge was slightly increased for first 10 days after Agnikarma procedure because of shedding of burnt epithelium of cervix. After 10 days, the discharge decreased and the patients found relief in other symptoms. After 7 days of Agnikarma, cervix was examined for healing. The area of erosion decreased and proper healing was noted in all patients. In subsequent follow ups patients found relief in all the symptoms including vaginal discharge. When the cervix was again examined after 3 months, the cervix was found totally healed and no discharge.

Effect of Agnikarma procedure on Subjective and objective parameters

Amount of vaginal discharges

Considerable relief (51.43%) was observed in vaginal discharge after the therapy, which was statistically extremely significant (P<0.01). Agnikarma enhances blood circulation and stimulate the glands that’s why the vaginal discharge increased initially. Srava is due to property of Kapha.

Low backache

64.53% improvement was recorded which was statistically extremely significant (P<0.01). According to Ayurveda, Shul is due to Vata dosha and Agnikarma works on Vata dosha by its Usna and Tikhsna and backache was improved.

Dyspareunia

Percentage of relief was 52.38% which was statistically very significant (P<0.01). It may be concluded Agni possesses Usṇaguna, this Guna of Agni are against the Vata.

Pruritus Vulvae

Percentage of relief was 58.33% which was statistically significant (P<0.05). Kaṇḍu (pruritus vulvae) is Ślesmala features according to Dalhana which is found in Karnini. Agnikarma works on the Kaphadosa by Laghu, Sukhsma, Tikhsna and Usnaguna. That’s why Kaṇḍu (pruritus vulvae) is subsided by Agnikarma.

Post Coital Bleeding

Percentage of relief was 50.00% which was statistically Non significant (P>0.05). As the symptom present in few patients that’s why the improvement was Non-significant.

Extent of erosion

Percentage of relief was 75.68% which was statistically extremely significant (P<0.001). By Agnikarma destruction of columnar epithelium was done and Vata, Kapha dosha were pacified.

Table 2: Shows the pattern of clinical recovery in objective parameter of cervical erosion in 15 patients treated with Agnikarma with Shalaka

| Symptoms            | Mean | Mean Diff | % Relief | SD± | SE± | W  | p value | Result |
|---------------------|------|-----------|----------|-----|-----|-----|---------|--------|
| Extent of erosion   | 2.467| 0.6       | 1.867    | 0.085| 0.148| 120 | <0.0001 | ES     |

*N.S = Non significant, S= significant, V.S = Very significant, E.S = extremely significant

Table 3: Showing the percentage relief of signs and symptoms

| Symptoms                  | Percentage relief |
|---------------------------|-------------------|
| Vaginal Discharge         | 51.43%            |
| Dyspareunia               | 52.38%            |
| Pruritus vulvae           | 58.33%            |
| Low Backache              | 64.53%            |
| Post Coital Bleeding      | 66.65%            |
| Extent of erosion         | 75.68%            |

Probable mode of action of Agnikarma

According to Ayurveda the probable mode of action of Agnikarma may be the property of Agni. The properties of Agni are Sukhsma, Laghu, Tikhsna and Usnaguna. Agnikarma was done by red hot Shalaka. The character of Physical heat of red hot Shalaka transferred as therapeutic heat to Mamsa Dhatu by producing Samyaka dagdha vraṇa. From Mamsa Dhatu this therapeutic heat acts in following ways- It works on both Vata and Kaphadosa. It works on Vata dosha by its Usna and Tikhsna and on the Kaphadosa by Laghu, Sukhsma, Tikhsna and Usnaguna. It works deep in the tissue because of its power of penetration to deep tissue by virtue of Laghu, Sukhsma and Tikhsna and maintains equilibrium. According to Ayurveda, every Dhatu
have its own Dhatvagni and when it becomes low, diseases begins to manifest. Agnikarma worked by giving external heat there thus Dhatvagni was increased, which helps to digest the aggravated Doshas and hence cured the disease. It increases the Rasa Rakta Samvahana (blood circulation) to affected site. So that the necessary oxygen and nutrient materials are supplied and waste products are removed. Agnikarma works on different Sampraptighatak of disease and thus Sampraptivightan is done by Agnikarma.

**Probable mode of action of Ghrita and Madhu**

After Agnikarma Ghrita and Madhu in sufficient quantity was applied over the wound. Its wound healing and anti-inflammatory properties reduced inflammation and promotes granulation and epithelization.

**CONCLUSION**

Bahirparimarjana chikitsa in the form of Agnikarma found as better alternative in the management of Karnini (Cervical erosion). No adverse effect or complications is produced with the use of these treatments. So this treatment is safe, economic, non-surgical, and very effective and can be used as a standard for treatment of cervical erosion.

**REFERENCES**

1. Neelam, Neerajkumar, Management of cervical erosion, AYU-Vol. 30, NO.2 (April-June) 2009, pp. 171-174.
2. Vaidya Yadavji Trikamji Acharya, Charaka Samhita, Varanasi, Chaukambha Sursbharti Prakashan; 2019, p.634.
3. Vaidya Yadavji Trikamji Acharya, Charaka Samhita, Varanasi, Chaukambha Sursbharti Prakashan; 2019, p.636.
4. Vaidya Yadavji Trikamji Acharya, Sushrutha Samhitha, Varanasi, Chaukambha Sursbharti Prakashan, 2018; p. 669.
5. Vaidya Yadavji Trikamji Acharya, Charaka Samhita, Varanasi, Chaukambha Sursbharti Prakashan; 2019; p.636.
6. Vaidya Yadavji Trikamji Acharya, Sushrutha Samhitha, Varanasi, Chaukambha Sursbharti Prakashan, 2018; p.669.
7. Dr.Shiv Prasad Sharma Ashtanga Samgraha, Varanasi, Chaukambhaa Sanskrit Series Office, 2019; p. 831.
8. Narendranath Sastri, Madhav Nidan, Motilal Banarasidas, Delhi, 1979; p. 852-3.
9. V.N.K.Usha, Streeroga Vijnan (A Textbook of Gynaecology), Delhi, Chaukambha Sanskrit Pratishtan India. 2016; p.292.
10. Loris Y. Hwang, Yifei Ma, Stephen C. Shiboski, Sepideh Farhat, Janet Jonte, and Anna-Barbara Moscicki, Active Squamous Metaplasia of the Cervical Epithelium Is Associated with Subsequent Acquisition of Human Papilloma virus 16 Infection Among Healthy Young Women, J Infect Dis. 2012 Aug 15; 206(4):504–511.
11. Vaidya Yadavji Trikamji Acharya, Susruta Samhitha Varanasi Chaukambha Sursbharti Prakashan, 2018, p.34.
12. Vaidya Yadavji Trikamji Acharya, Susruta Samhitha Varanasi Chaukambha Sursbharti Prakashan, 2018, p.52.

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