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The Effect of Virechana in Anyadhatu Samsrushta Reto Dushti

Pradeep L. Grampurohit*, B.S. Prasad, S.S. Harti*****

Abstract

Cells other than Spermatozoa (Non-sperm cellular elements) like immature cells, leucocytes, RBC, particulate debris; amorphous matter and Epithelial cells present in semen greater than 2-4 per ml and agglutinate can be called as Anyadhatusamashrita, which is one among the AshtaShukraDushtiwhich is associated with Nispraja, GarbhaVikruti,Aharshana and Klaibya. AnyadhatuSamrushta is the formed by the vitiation of Kapha and Pitta Doshas. Virechana is the Shodhana procedure that is specific for the elimination of vitiated Pitta and Kaphadoshas. Thus, in the present study, it is hypothesized that Virechana helps in removing Anya Dhatu from the Shukra. In the present study, 30 subjects with Anyadhatusamsrushta found during the retopariksha were subjected Virechana with Trivrtchurna. There was significant ($p<0.05$) reduction in liquefaction time and viscosity, macrophages, immature cells, epithelial cells, and amorphous matter.

Keywords: Male infertility; Shukradhatu; Anyadhatu Samsrustha; Virechana.

Introduction

'Infertility is the inability of a sexually active, non-contraception couple to achieve pregnancy in one year' (WHO).[1] About 25% of couples do not achieve pregnancy within 1 year, 15% of whom seek medical treatment for infertility and less than 5% remain unwillingly childless. Male causes for infertility are found in 50% of involuntarily childless couples. Reduced male fertility may be the result of congenital and acquired urogenital abnormalities, infections of the genital tract, increased scrotal temperature (varicocele), endocrine disturbances, genetic abnormalities and immunological factors. No causal factor is found in 60-75% of cases found to be idiopathic male infertility. Acute and chronic infections of the genitor urinary tract may play a contributing role in male factor infertility. Infectious processes can impair fertility by different mechanisms, including deterioration of spermatogenesis, impairment of sperm function, and obstruction of the seminal tract. [2,3]

Shukra is one among the Saptadhatus basically meant for reproduction and also provides the qualities of Dhairya, Preeti, Dehabala, Harsha[2] etc. Its abnormal state leads to Ashta Shukra Dushti, which is associated with Nispraja, Garbha Vikruti, Aharshana and Klaibya.[3] Anyadhatusamsrustha is one among the eight Shukra Doshas.[4] Cells other than Spermatozoa (Non-sperm cellular elements) like, immature cells, leucocytes, RBC, particulatedebris; amorphous matter and Epithelial cells present in semen greater than 2-4 per HPCandagglutinate can be called as Anyadhatusamashrita.[5] Agglutination of spermatozoa means motile sperms stick with each other, head to head, tail to tail etc.

The presence of immature germ cells in semen indicates spermatogenesis dysfunction at the testicular level whereas leukocytes in

Author's Affiliation: *HOD, Reader, Dept of Panchakarma, **Principal, ***Reader, Dept. of Swasthavrittha, KLEU Shri BM Kankanawadi Ayurved Mahavidyalaya, Belgaum, Karnataka, India.

Reprint's Request: Dr. Pradeep L. Grampurohit, HOD, Reader, Dept of Panchakarma, KLEU Shri BMK Ayurved Mahavidyalaya, Belgaum, Karnataka, India.

E-mail: pradeepgrampurohit@gmail.com

concentrations exceeding 1x103/ml indicate inflammatory conditions possibly related to infection.[6] Immature cells As the number of sperms decreases, the ratio of immature germ cells to total germ cells increases. While assessing immature germ cells instead of giving special attention to the number of immature germ cells in semen, the ratio of immature germ cells to total germ cells should be considered.[7]

Leukocytes are the most significant non-sperm cellular elements in thesemen, and are a frequent finding in patients with unexplained infertility.[8,9] Many author are convinced that the presence of inflammatory cells in semen interferes with the fertilizing ability of the spermatozoa.[10] Initially considered solelyas a marker for genital tract infection, contemporary research has shown that leukocytes can bepresent with no other signs of infection or immuneresponse[11,12,13] and have intimate links to reactive oxygen species (ROS). Leucocytes in semen produce oxidative stress (the generation of free oxygen radicals) and cytotoxic cytokines secretion (Lymphokines and monokines). These products may interfere with sperm progression. Leucocytes may also be a factor in sperm agglutination. The normal continuous process desquamation of squamous epithelia usually culminates in cell nucleus loss as epithelial cells die (Are anucleated). Therefore, large anucleate bodies of residual cytoplasm may be found in the semen sample. Their significance remains unknown.[14] In an earlier study by Gopalakrishna K *et al*, showed that the seminal fluid viscosity and percentage particulate debris was increased significantly in the infected group (Trichomonasvaginalis) ($P < 0.001$).[15]

Pitta and Kapha are the vitiated Doshas present in Anyadhatu Samsrustha type of Shukradushti. Virechana is the Shodhana procedure that is specific for the elimination of vitiated Pitta and Kaphadoshas. Thus, in the present study, it is hypothesized that Virechana helps in removing Anya Dhatu from the Shukra.

Methodology

Study Design

The study was an open clinical trial with the single group assessed with pretest and posttest design.

The ethical consent for the study was taken from the Human Ethical committee, KLE University, Belgaum.

Inclusion Criteria

Male patients of age group between 18 – 40 yrs having diagnosed with semen samples having Anya-dhatusamshrashtaRetodushti as follows were selected for the study.

1. Amorphous matter – Grade 3 and 4
2. Epithelial cells – More than 5 cells
3. Immature cells – More than 5 cells
4. Leucocytes – More than 5 cells

The subjects willing to participate were informed about the study and enrolled after their consent.

Exclusion Criteria

1. Patients having Genito urinary tract infection and showing positive results forVDRL,HIV,HbSAg were excluded from the study.
2. Those with history of injury to testes, varicocele, hydrocele, undescended testis or its corrective surgery, Vasectomy-reversal surgery, history of any chronic illness like tuberculosis, mumps, etc. were excluded.

Sample Size

A total of 30 subjects with Anya DhatuSamsrushta were recruited in the study.

Intervention

1. Agni Deepana
   a. The patients were given Agni-

deepanachikitsa with 2 tablets Chitrakadivati (250mg) thrice a dayuntil the attainment of Niraama Lakshanas and maximum for the 7 days.

2. Snehapana– (Until the attainment of Samyak Snigdha Laxanas)
   a. Snehapana with moorchitaghrita till samyaksnigdhalakshanawere attained or maximum for the 7 days.
3. VishramaKaala – 3 days
   a. Sarvanga Abyanga with moorchitatilataila followed by Bashpasweda for three days.
4. Virechana –
   a. On the day of Virechana, 20 – 40 gms of Trivritchurnawas given based on assessment of Koshta.
5. Samsarjana karma – 3-5 days
   a. SamsarjanaKrama (PeyadiKrama) was advised for 3-5 days based on theAntika and VegikaShuddhi.

Assessment Criteria

1. Samyak Snigdha Lakshana – The subjects were assessed for samyaksnigdha lakshana[16] during the Snehapana Kaala.
2. Virechanashuddhi – Antika and Vaigikashuddhi were observed on the day of Virechana
3. Semen Analysis was done on Day 0 and 15 days after Samsarjana Krama at Srushti Fertitlity Center, KLE Ayurved Hospital, Belgaum.
   a. Following strict abstinence of four to six days, samples were collected in wide-mouthed sterile containers, by masturbation, in the laboratory. Samples with partial spillage were rejected.
   b. All semen samples were analyzed for presence of immature cells, leucocytes, Epithelial cells and amorphous matter on day 0 and day 15 after Samsarjana Karma.

Observations

Table 1: Age Distribution among 30 Subjects

Table 2: Showing the Prakriti among 30 Subjects

Table 3:Showing the Koshta among 30 Subjects

Results

Table 4: Showing the Effect of Virechana

Discussion

Though the results are significant statistically, there was no remarkable changes in parameters hence it can be said that from our study thatvirechana has no effect over semen parameters. Virechana is Doshapratyanikachikitsa. Treatment aimed at the elimination of dosha is called as doshapratyanikachikitsa. Virechana helps in removing the vitiated doshas and facilitates better bio-availability of medicines administered thereafter. Hence following the elimination of the dosha, post evacuation procedures like Rasayana and Vajikarana drugs in case of Shukradushti should be administered. With parallel to this, Vajikarana drugs are beneficial only after Shodhana. Charaka mentions in the context of Vajikarana that, as the paint applied on dirty clothes cannot remove paint properly, likewise the medicines given to the body without shodhana will not be beneficial. Thus it can be said that administration of virechana may not be alone sufficient in correcting Shukradushti.

Adverse Events

No adverse events were found during the study.

Conclusion

Though significant results were found statistically, there were no remarkable changes in parameters by the administration of virechana.

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