**A brief overview of leucorrhoea in adolescent girls, highlighting the rubrics and remedies from different homoeopathic repertories**

**Abstract**

Adolescence is a time of transition that includes both physical and psychological growth. In adolescent girls, vaginal discharge is a common symptom at the time of ovulation, before and after menstruation. Differentiating between pathological and physiological leucorrhoea can be difficult. A crucial component of treatment modalities is counselling. For those who are on the cusp of womanhood, education about reproductive health is essential.From a holistic approach, homoeopathy adjusts and harmonises the state of the female body to produce a more effective therapeutic result. This article highlights a reportorial approach seen through the perspectives of various homoeopathic repertories.In this review article, we discuss and differentiate between pathological and physiological vaginal discharge. We emphasise the rubrics from three homoepathic repertories that categorise leucorrhoea according to colour, consistency, odour,cause(spiritual, emotional, mental, and physical), and concomitant symptoms.

**Keyword** –Leucorrhoea ,homoeopathy, adolescent girl, repertory, counselling.

**Introduction**

Excessive normal vaginal discharge is known as leucorrhoea ,it is also known as Florus albus. Adolescence is a period of psychosomatic and sociological adjustment, as well as growth and development on the physical and mental levels. A lot of gynecological issues affect adolescent girls during this crucial time in their lives.Excessive discharge is a common subjective symptom that varies depending on the individual,it is an expression of physiological changes, or an underlying disorder either functional or organic but clinical and laboratory testing is necessary to determine it.It is physiological in the vast majority of cases. A non-purulent, clear, non-irritating mucoid discharge is present.[1]

There are three sources where discharge can occur: the vagina, the cervix, or the uterus. A small amount of watery, highly alkaline secretion is produced by the tubular glands of the endometrium in a healthy uterus. [2]The cervix's racemose glands produce a thick, mucoid secretion that is typically infrequent and undoubtedly alkaline, with a pH between 8 and 9. The stimulation of the cervical glands and vaginal mucous membrane by oestrogen is the main cause of these changes.Malnutrition, intestinal parasites, poor hygiene, skin infections, and respiratory tract infections are all widespread contributors in our nation. Although Haemophilus, Monilia, and Trichomonas infections are rare, they are becoming more common due to earlier and more frequent sexual indulgence. [3]

**Types of leucorrhoea-**

**Physiological leucorrhoea**

Physiologic leukorrhea is clear or milky, thin, odourless, and (in most cases) nonirritating. The level of endogenous oestrogen affects the physiological underpinnings of typical vaginal secretion. Increased secretory activity of the endocervical glands and increased glycogen content in the superficial vaginal epithelium are both effects of rising oestrogen levels.Normally, only a small amount of mucoid secretion is produced by the cervical glands. The glycoprotein mucin's radical separates, ferments, and transforms into lactic acid. On the other hand, if too much mucus is secreted, it pours out at the vulva.[4]

**Aetiology**

***During puberty***

Increased levels of endogenous estrogen lead to marked overgrowth of the endocervical epithelium which may encroach onto the ectocervix producing congenital ectopy (erosion) → increased secretion.

***During the menstrual cycle***

1. Around ovulation →Peak rise of estrogen → increase in secretory activity of the cervical glands.
2. Premenstrual pelvic congestion and increased mucus secretion from the hypertrophied endometrial glands.

***During sexual excitement***

Abundant secretion from the Bartholin’s glands.

**Pathological leucorrhoea**

Discharge – causes distress and irritation

Associate with itching

Colour – white,yellow,greenish,blood stained(according to cause)

Foul smelling odour

**Aetiology**

* *Vaginal Infections:* Vaginal discharge can be due to STIs like Chlamydia and gonococci
* *More commonly due to non-sexually transmitted infections like:* Candida, Trichomonas and Bacterial vaginosis etc.
* Congenital erosion of the cervix may cause a noticeable thick mucus discharge at puberty

**Other causes**

* Intestinal parasite
* tuberculosis
* Poor hygiene
* Foreign bodies
* Sexual abuse
* Impaired immunity
* Unhealthy lifestyle: Improper hygiene, Stress, Dirty environmental sanitation and in underprivileged people due to poverty.
* Psychological disturbance
* Urinary tract infection
* Tight-fitting synthetic undergarments

**Clinical manifestation**

Leucorrhoea is itself a symptom, not a disease, some other conditions associated with it.

***Normal vaginal discharge***:

* Thin, clear, white or slightly yellow in colour
* Often increases 2 weeks before menstruation
* May change or increase with some birth control methods
* Has no bad odour
* Does not cause itchiness or irritation

***Signs of Infection***

* Vaginal itching, burning or irritation
* Thick, white/green/yellowish vaginal discharge
* A change in consistency (stringy,sticky etc.)
* foul smell (lasts more than a day)
* Painful intercourse
* Painful urination
* Pain or tenderness in lower abdomen
* Constipation
* Anaemia
* Local soreness
* Lumbago
* Anorexia
* Pain in menstruation
* Malaise/ General weakness
* Blisters, bumps or sores in your genital area.[5]

**Leucorrhoea – concepts and homoeopathic approach**

**Philosophical background**

Hahnemann based his system on the principle of “like cures like”, which holds that a substance that can cause symptoms in a healthy person can be used in a highly diluted form to treat those same symptoms in a sick person.This principle is known as the “law of similia”.[6]

In homoeopathy,leucorrhoea is viewed as a symptom of an underlying imbalance in the body’s vital force or life energy. Homoeopathy can be demonstrated to be an effective method of treatment for leucorrhoea as it emphasises treating the patient as a whole not onlysigns and symptoms.[7]

The practical section of the Organon of Medicineaphorism 71 to 291. Our master's classification of diseases can be found in aph 72–82. What category of illness does leucorrhoea fit into? Is it an acute condition? Its aetiology revealed that it is caused by chronic inflammation or endocrine dysfunction (excess oestrogen), and since these conditions persist for a long time without proper management, the chronic miasmatic disease is unavoidably the result.

Aphorisms 94 and 95, which discuss the investigation of particular/accessory circumstances and lesser accessory symptoms, respectively, provide key guidelines for case-taking for chronic diseases. In addition to this, he wrote in aphorism 206-209 about the treatment of chronic diseases and the need to understand a person's miasmatic background in Aphorism 208.Therefore, the constitutional approach is the best treatment for chronic disease (vaginal discharge/long-term leucorrhoea), according to the literature. [8]

**Different Repertorial approach**

Repertory is an index of homoeopathic materia medica which is full of information collected from toxicology, drug proving and clinical experiences.

Repertoriasation is basically an elimination process that begins with a large selection and gradually reduces it to a manageable small group of medicines, making the final decision easier with the aid of additional references to the materia medica.

Three different repertories are used in this review article: -

* Synthesis 8.1V repertory in RADAR 10.0.028 version
* phatak's repertory
* boerickes repertory

All three repertories have different approaches,commonly used in homoeopathy for case analysis and remedy selection.

Reportorial Rubrics for leucorrhea in adolescent in Synthesis 8.1V repertory in RADAR 10.0.028 version

Synthesis repertory is also a comprehensive repertory that includes both physical and mental symptoms and modalities.

* FEMALE GENITALIA/SEX – LEUKORRHEA- morning – girl; in

Puls.

* FEMALE GENITALIA/SEX – LEUKORRHEA – children;in-girl;little

Asper.bar-c. calc. calc-p. carb-ac. carb-v. caul. Cina cub. hydr. hyper.kali-p. mang. Med.MERC.merc-i-f. mill. Nat-m. puls. Senec. SEP. sulph. Syph. Viol-t

* FEMALE GENITALIA/SEX – LEUKORRHEA – milky – girls, in little

Hyper.

* FEMALE GENITALIA/SEX – LEUKORRHEA – fright,before the menarche; from

PULS.

* FEMALE GENITALIA/SEX – LEUKORRGEA – itching,menses;after

Kreos. Nit-ac. Ph-ac.

* FEMALE GENITALIA/SEX – LEUKORRHEA – students; in female

Gels.

* FEMALE GENITALIA/SEX – LEUKORRHEA – sexual excitement ,from

Canth. Hydr. Ign. Orig. plat. Puls. Senec.

* FEMALE GENITALIA/SEX – LEUKORRHEA – puberty, at

ferr. Sep.

* FEMALE GENITALIA/SEX – LEUKORRHEA – masturbation; from

Canth. Orig. plat.Puls.

* FEMALE GENITALIA/SEX – LEUKORRHEA – anemia,with

Calc.Cycl.Ferr.Graph. Helon. Hep. Ph-ac. Phos. Senec. Sil.

* FEMALE GENITALIA/SEX – LEUKORRHEA ,acrid, excoriating,children;in

Cub. [9]

A CONCISE REPERTORY OF HOMOEOPATHIC MEDICINES **BY DR. S.R.PHATAK**

Phatak’s repertory is a more limited repertory that focuses primarily on the mental and emotional symptoms of the patient.it is based on the concept of “Totality of symptoms” which means that all the symptoms of the patient are taken into consideration when selecting a remedy. In this article, it is used to identify the mental and emotional symptoms associated with the condition, such as anxiety, irritability, and mood swings.

* LEUCORRHOEA, Girls, little

Calc. ,caul., mang.,merc.,senec., sep.

* LEUCORRHOEA , Girls, little, acrid

Cub.

* LEUCORRHOEA, Girls, little, infants

Cann.

* LEUCORRHOEA, Girls, little, yellow

Merc-i-f.

* LEUCORRHOEA, Masturbation, from

Canth., plat.,puls.

* LEUCORRHOEA ,Menses, during

Iod.

* LEUCORRHOEA, Menses, and after

Graph., pall., sul-i.,

* LEUCORRHOEA, Menses, after

Bov., calc., calc-p., graph., kreos., mag-c., tab.

* LEUCORRHOEA, Menses, before

bov., calc.,graph.,kreos., sep.,sul-i.,

* LEUCORRHOEA, Menses, between

borx., calc., sep.

* LEUCORRHOEA, Menses, instead of

ars., cocc., graph., nat-m., nux-m., phos., sep., xan.

* LEUCORRHOEA, Puberty, at

ferr.

* LEUCORRHOEA, Sexual excitement ,from

Canth., hydr., puls., senec.

* LEUCORRHOEA, Coition, after

nat-c.,sep.

* LEUCORRHOEA, Coition, amel.

merc. [10]

HOMOEOPATHIC REPERTORY BY **WILLIAM BOERICKE, M.D.**

Boericke’s repertory is a comprehensive repertory that covers a wide range of symptoms and modalities. It is arranged in alphabetical order and is based on the concept of “mind, body, and spirit” as interdependent entities. It contains both general and specific symptoms and it is used to identify the specific physical symptoms and modalities associated with the condition, such as the colour and consistency of discharge, presence of itching or burning and aggravating or ameliorating factors.

* FEMALE SEXUAL SYSTEM, Leucorrhoea, Occurrence, modalities,in, infants, little girls

**ASPER., CALC.,**cann-s., carb-ac.,**CAUL.,CINA.,CUB.,**Hydr., Merc., Merc-i-f., **MILL., PULS., SEP.,** Syph.

* FEMALE SEXUAL SYSTEM, Leucorrhoea, Occurrence, modalities, After,menses and between periods

Aesc.,**ALUM.,**borx.,**BOV., CALC., COCC.,**con.,**EUPI., GRAPH.,**hydr.,**IOD.,**kalm.,**KREOS., NIT-AC.,**ph-ac.,**PULS.,**sabin.,**SEP.,**Thlas.,**XAN.**

* FEMALE SEXUAL SYSTEM, Leucorrhoea, occurrence, modalities,After,coitus

Nat-c.

* FEMALE SEXUAL SYSTEM, Leucorrhoea, occurrence, modalities, instead of menses

**COCC.,** graph., **IOD., NUX-M.,** phos., puls., senec., **SEP.,** xan.

* FEMALE SEXUAL SYSTEM, Leucorrhoea, occurrence, modalities, Before,menses

**ALUM.,** bar-c., borx., **BOV., CALC.,**calc-p., carb-v., con., **GRAPH.,** kreos., pic-ac., **PULS.,** sep., Thals.

* FEMALE SEXUAL SYSTEM, Leucorrhoea, Concomitants, Pruritus vulvae

agar., alum., **AMBR., ANAC.,** calc.,  **FAGO., HELON.,**hydr., kreos., merc., **SEP.,**sulph. [11]

In the case of leucorrhoea, different approaches can be used to identify the most appropriate remedy. The goal of using these Repertories is to highlight the maximum rubrics that cover leucorrhoea in teenage girls and the selection of the most appropriate approach will depend on the individual patient’s symptoms and overall health status.

**Conclusion**

Leucorrhoea is a common gynaecological issue in Adolescent girls who are transitioning from childhood to womanhood. The adolescent girl must be empowered in order to help her adjust to the changes and raise awareness of nutrition, and hygiene education on reproductive health, and create a supportive and enabling environment for self-development. Homoeopathy is a complementary and alternative medicine that can offer a natural and safe approach to treating leucorrhoea in adolescent girls. And it prioritises the patient's spiritual, emotional, mental, and physical well-being while also getting to the core of the issue. According to the homoeopathic concept of individualization, Patients’ constitution, causative factors, signs and symptoms, and framing a totality of symptoms, which aids in getting a perfect similimum. In addition to homoeopathic treatment, it is important for adolescent girls with leucorrhoea to maintain good hygiene, wear loose-fitting clothes, avoid douching, and take a healthy nutritious diet. Leucorrhoea can be cured completely, rapidly, gently, and permanently through homoeopathy. Need of conducting more research on this topic, so we can gain a better understanding of leucorrhorea in adolescent girls and develop more effective treatments to address this condition.

**Reference**

* 1. Susila, I., & Kastar, A. (2020). Knowledge Of Princess Adoles About Personal Hygiene When Does The Princess Junior High School Students Know. *STRADA Jurnal Ilmiah Kesehatan*, *9*(2), 936–943.
  2. Sulistiyanti, A., Yuliana, A., & Jifaniata, A. (2022). Factors Associated with the Incident of Leukorrhea in Adolescent Girls. *Indonesian Journal of Global Health Research*, *4*(2), 425-432.
  3. Britannica, T. Editors of Encyclopaedia (2017, July 17). leukorrhea. Encyclopedia Britannica.
  4. Ramasamy SL, Chery S (2019) Sexually Transmitted Disease and Leukorrhea in a Rural South Asian Himalayan Community: A Study of Perceptions and Barriers to Treatment. Int J Womens Health Wellness 5:096.
  5. Kumar N, Choya R. Ethnobotanical notes on some plants used for the treatment of leucorrhoea and other gynaecological problems in Hamirpur district of Himachal Pradesh. Indian J Fundam Appl Life Sci. 2012;2(4):126-33.
  6. Brierley-Jones, L. (2021). Talking therapy: The allopathic nihilation of homoeopathy through conceptual translation and a new medical language. *History of the Human Sciences*, *34*(3–4), 121–141.
  7. Jadoun, Astha Sikarwar, Leucorrhoea and Homoeopathy. International Journal of Homoeopathic Sciences 2020; 4(2): 01-06.
  8. AU, Dr.S. and Perumal, Dr.K. (2022) ‘A brief overview of female infertility, highlighting the rubrics and differentiating the remedies in the homoeopathic medical repertory’, *International Journal of Homoeopathic Sciences*, 6(3), pp. 158–161.
  9. Schroyens, F. (2012) *Synthesis: Repertorium Homeopathicum syntheticum*. London: Homeopathic Book Publishers.
  10. S.R.PHATAK (1992) in *A concise repertory of homoeopathic medicines: arranged alphabetically*. 2nd edn. delhi: B. Jain publishers pvt.Limited, p. 410.
  11. Boericke, W. (1993) *Pocket manual of homeopathic materia medica and repertory*. New Delhi: Jain.