

Resolution of the Cervical Low-Grade Squamous Intraepithelial Lesion (LSIL) by Murr ointment (Unani formulation): A Case Report

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ABSTRACT:

A 28-year-old married woman attended female OPD of National Institute of Unani Medicine Hospital, Bangalore in January 2022 with a chief complaint of white discharge per vaginum in the past 1 year, which was thick in consistency, copious in amount, white in colour, irritant, and non-offensive and associated with lower abdominal pain and low back ache as stated by the patient, and no associated co-morbidities. Pelvic examination showed copious white mucoid discharge with the hypertrophied, irregular cervix and grade 3 cervical ectopy. In this case report of women with cervical LSIL on a pap smear, 6g *Murr* ointment (Unani formulation) was applied with an applicator per vaginum on the eroded cervical area daily once at bedtime for 4 weeks & women underwent scheduled follow-up examinations once fortnightly for 4 weeks to observe healing of cervical erosion. On clinical examination after 4 weeks of treatment, significant improvement in the amount of vaginal discharge, cervical grading, and associated symptoms were observed, and the pap smear was normal. Topical application of the ointment was not only effective in the management of LSIL but also, has shown encouraging results in treating the condition. No untoward reactions were observed in this case study.

KEYWORDS: low-grade squamous intraepithelial lesion, Murr ointment pap smear, *Sailan al-Rahim*, *Sartan al-rahim*.

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INTRODUCTION:

Squamous cell cervical carcinoma is the most prevalent gynaecological malignancy and the fourth leading cancer in women worldwide.^[1] Although there are several factors that can encourage the development of cervical carcinoma, the Human Papillomavirus (HPV) infection is the most significant one because it is detected in

nearly 90% of all cases. The emergence of precancerous lesions like low-grade (LSIL) and high-grade (HSIL) squamous intraepithelial lesions, which are targets for the early diagnosis and treatment of cervical carcinoma, can also be caused by HPV.^[2]

After an HPV infection, about 25% of teenage and young women acquire LSIL.^[3]

and which cannot eliminate high-grade squamous intraepithelial lesions (LSIL-H) when compared to the 2001 Bethesda System (TBS 2001) cytologic classifications of LSIL and high-grade SIL (HSIL).^{[4], [5]} Due to a lack of facilities or recurrences, a significant majority of these precancerous lesions found by Pap smear go untreated. These may regress spontaneously after receiving medicinal or surgical therapy, or they may develop into aggressive cancer over a period of years.^[6] However, the recurrence rates after lesion treatment are highly variable due to factors such as the type of treatment used to remove them since the limited precision of these treatments has the risk of performing incomplete excisions. Contrastingly, it has been suggested that the extent of the cervical excision correlates with the likelihood of premature birth, making it difficult to balance the risk of effective treatment against iatrogenic harm in reproductive women,^[7] hence new management methods and therapies are required.

One of the oldest traditional medicinal systems that have worked over the ages to prevent and treat a variety of medical conditions is the Unani System, which has garnered increased acceptance in recent years.^[8] The description of cervical cancer is mentioned under the subject of *sartan al-rahim* in classical Unani book like *Al Qanoon*.^[9] The cause is either *waram-e haar (waram falghamooni)*, *waram-e sulb*. In *Al Hawi*, Razi claims that *sartan* is the *waram-e sulb* of the uterus (*Rahim*) and that its root is stony hard and reddish in hue. The lesion may be ulcerated or nonulcerated when it affects the cervix and is associated with severe lower abdominal and back pain.^[10]

Evidence suggested that the Murr ointment (Unani formulation) comprises *Murr (Commiphora myrrha)*, *Safeda (Lead*

Carbonate), *Anzaroot (Astragalus sarcocola)*, *Mom (Beeswax)*, and *Roghane gul (Rose oil)* have *Muhallil-i-awarm* (anti-inflammatory), *mujaffif* (desiccant), *mudammil-e- quruh* (healing of the wound), *qabid* (astringent), *musakkin* (analgesic), *dafi-i-ta'ffun* (antiseptic) properties.^[11-14] which were used in the treatment of low-grade squamous intraepithelial lesions (LSIL).

CASE REPORT:

A 28-year-old married woman (P2L2) with marital life of 6 years, who was a homemaker attended OPD of National Institute of Unani Medicine Hospital, Bangalore in January 2022 with a chief complaint of white discharge per vaginum in the past 1 year which was thick, white, irritant, and non-offensive and was associated with lower abdominal pain and lower back ache as per the patient statement. Apart from this, she had a history of scanty flow during menstruation and weight gain since 8 months, for which she had not received any treatment. She is moderately built with no significant medical or surgical history. She had two kids, both delivered at the hospital vaginally at full term with an uneventful pregnancy, and lactation period. She belongs to the low socioeconomic group and had no history of vaginal discharge, STDs, fungal infection, contact bleeding or painful coitus. The patient's partner also reported good health, with no history of STDs, fungal infections, or urogenital infections and no significant medical and surgical history.

On clinical examination: Her general condition was stable, with no significant abnormalities. On pelvic examination, an inspection of external genitalia showed no obvious anomalies. Per speculum examination revealed hypertrophied cervix with an irregular surface demonstrating grade three erosion on both lips with

copious white mucoid discharge and the vaginal wall appears healthy. Bimanual examination showed the uterus was anteverted, normal sized, mobile, firm, and non-tender with bilateral fornices mobile, and nontender. Investigations were done as shown in table-1

MATERIALS AND METHOD:

Intervention: *Murr* ointment containing *Murr* (*Commiphora myrrha*), *Safeda* (*Lead Carbonate*), *Anzaroot* (*Astragalus sarcocola*), *Mom* (Beeswax), and *Roghane gul* (Rose oil) each in equal quantities in an Unani formulation.^[9]

Method of preparation, route of administration, and dosage:

According to the procedure described in a classical Unani text, *murr*, *safeda*, and *anzaroot* were taken in equal amounts, thoroughly powdered, and used to make an ointment with *mom* and *roghane gul* as follows: The fine powder of *murr*, *safeda*, and *anzaroot* (each 1 kg) was added, stirred well, and then allowed to cool until it forms a soft and semi-solid mass. *Roghane gul* was heated to a volume of 1 litre. Wax was then dissolved in it and mixed thoroughly.^[15,16] Healing was seen after applying 6 g of ointment daily once at bedtime for two weeks to the eroded cervical area with an applicator per vaginum. A proper cleanliness routine and refrain from sexual activity were advised to patients.

FOLLOW-UP AND RESULT:

The patient was followed fortnightly during the trial. At each visit, vaginal discharge, low backache, and grading of cervical ectopy were assessed and noted and assessment cum follow-up with significant results are mentioned in table 2.

BT-before treatment, F/U-follow-up, LSIL - low-grade squamous intraepithelial lesion

Vaginal discharge: It is evaluated as Mild-1: No staining or moistness of underclothes Moderate-2: Underclothes are soiled and require changing. Severe-3: Requires the wearing of some extra absorbent pad.

Low backache: A coloured Visual Analogue Scale (VAS) was used to measure the severity of low back discomfort. As 0-1 (Green Color): No pain to distress, 2-4 (Greenish Yellow): Annoying to uncomfortable, 6-8 (Yellow): Uncomfortable to dreadful, 6-8 (Yellowish red): Dreadful to horrible, 8-10 (Red): Horrible to agonizing.

Cervical ectopy: Based on the extent of the ectropion, the scale used to evaluate cervical ectopy was divided into three grades. Ectopy that covers 1/3rd of the cervix is a grade I. When the cervix's 1/3rd to 2/3rd area is covered with ectopy, it is grade II. Ectopy that covers more than 2/3rd of the cervix is grade III.^[17]

Pap Smear: After the intervention on the first follow up Pap smear was obtained, which showed a Normal cervical smear.

Table 1: Investigations:

Test	Pre
Hb, WBC	13.2gm/dl, 13200/Cmm
RBS	78mg/dL
HIV	Non-reactive
VDRL	Non-reactive
CUE	Pus cells: 1-2/hpf, epithelial cells: plenty/HPF,
Thyroid profile	T3-1.14ng/ml, 4-9.6ug/dL, TSH-1.5mIU/mL
PAP smear	Low-grade squamous intraepithelial lesion
USG pelvis	Normal, with no significant abnormality

Table 2: Assessment cum follow-up chart with result:

Subjective parameters	BT	During treatment		After treatment	
		1st F/U	2nd F/U	1st F/U	2nd F/U
Vaginal discharge	3	2	2	1	
Low backache	2	2	2	2	
Cervical ectropion grading score	3	3	2	1	
Objective parameter					
LSIL in pap smear	Positive			Normal Cervical smear	

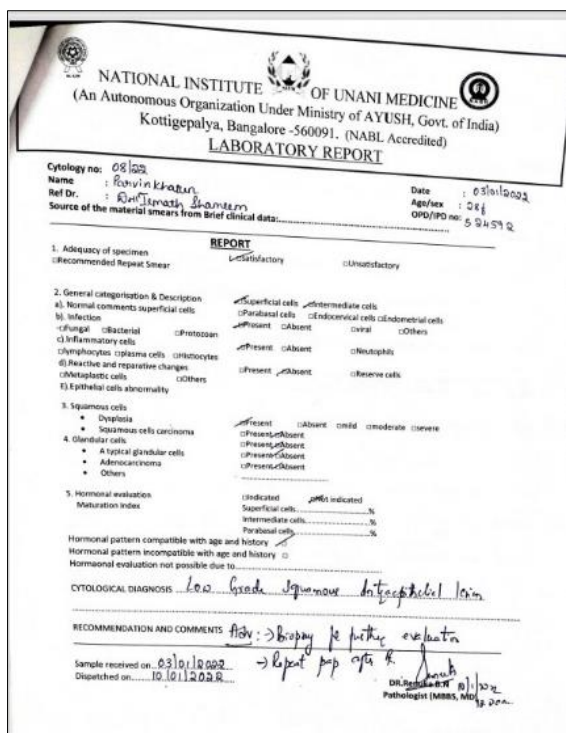


Fig 1: Pap smear before the intervention

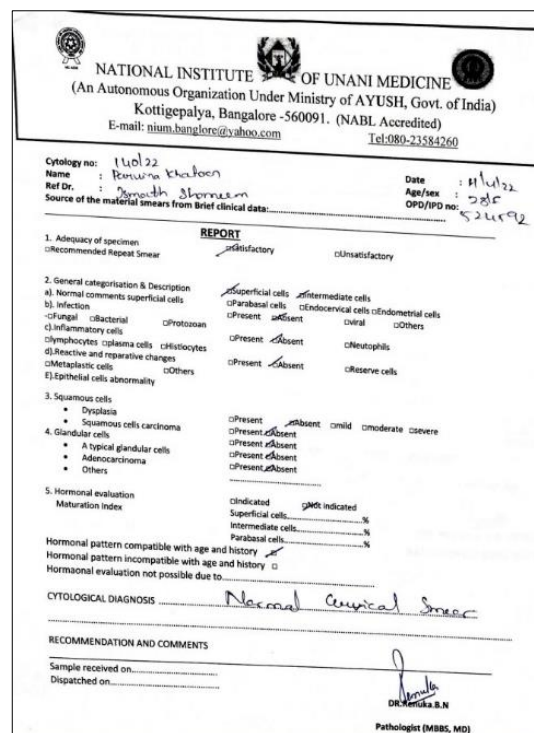


Fig 2: Pap smear after the intervention

DISCUSSION:

With just four weeks of intervention in the form of an ointment, outcome measures showed a significant improvement, demonstrating the effectiveness of the Murr ointment (Unani formulation) in the treatment of LSIL and the alleviation of the related symptoms. Additionally, it may offer a superior alternative for the treatment of cervical erosion, while in conventional medicine, surgical treatment like

cryocautery or electrocautery is the only treatment option.^[18] The pharmacological study has also revealed that research drugs exhibit anti-microbial, anti-inflammatory, antioxidant, anti-cancer, anti-ulcer, analgesic, and wound-healing properties. Additionally, the anti-ulcer properties of *murr (Commiphora myrrha)*, *anzaroot (Astragalus sarcocolla)*, *roghan gul (rose oil)*, and beeswax are thought to be mediated by flavonoids, saponins

(glycosides), carbohydrates, and alkaloids (terpenoids, steroids), among other compounds. A class of polyphenolic substances known as flavonoids has anti-ulcerogenic, anti-inflammatory, anti-bacterial, and antioxidant characteristics that strengthen the mucosal barrier and encourage fast ulcer healing. Ointment's ability to heal wounds may help to prevent microbial invasion by promoting healthier tissue growth. Furthermore, the ointment certainly speeds up tissue epithelization and wound healing.^[17]

CONCLUSION:

It can be inferred based on the results that; Murr ointment (Unani formulation) are much more effective in LSIL. Hence, it can be used as an alternative treatment option in patients with LSIL.

LIMITATION OF STUDY:

It was a single case study; case series can be conducted before planning for a pilot study on patients with LSIL.

INFORMED CONSENT:

Written informed consent was obtained from the patient for the treatment and publication of this case report.

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