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Review Article

Concept of cervical ectopy/Quruhal Rahim in Unani system of medicine: a review

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ABSTRACT

Cervical ectopy is one of the commonest gynecological conditions seen in OPD's, about 80-85% of women suffer from cervical ectopy during their life time. Many a times, it is an accidental finding in an asymptomatic woman coming for routine gynecological examination. Although it is a benign lesion, but may predispose to complications like infertility, cervical intraepithelial neoplasm, risk of various sexually transmitted infections like *C. trachomatis*, *N. gonorrhoea*, human papilloma virus, human immunodeficiency virus, cytomegalovirus and shows malignant changes as it progresses. Ectopy occurs when the columnar epithelium lining the endocervix, extends onto the ectocervix. As the disease takes 10-20 years to progress from pre invasive to invasive disease, preventive measures such as screening and treatment modalities should be adopted. Early diagnosis of cervical ectopy is important for its effective management and for prevention of its long-term sequel. The treatment option available in conventional medicine includes surgical procedure either electro or, cryocautery, but have their own complications. Hence, this treatment is limited due to its complications and contraindications and need for safer alternate therapy. In Unani system of medicine, various formulations are available as treatment of quruhal rahim, which have been recommended to be used locally in the form of humool for immediate healing of wound, exhibiting the properties of anti-inflammatory (muhallile warm), desiccant (mujaffif), wound healing (mundamile qurooh), sedative (musakkin), antiseptic (dafa'e ta'ffun) etc. This review article gives a detailed description of cervical ectopy as mentioned in classical Unani text including its etiopathogenesis, clinical presentation and principles of treatment as well as evidence-based Unani medicine.

Keywords: Cervical ectopy, Humool, Quruhal rahim, Unani system of medicine

INTRODUCTION

Cervical ectopy is one of the commonest gynecological conditions seen in OPD's and 80-85% of women suffer from cervical ectopy during the reproductive age.¹⁻⁶ Many a times, it is an accidental finding in an asymptomatic woman coming for routine gynecological examination.⁷⁻¹¹ Though it is not fatal, but if left untreated may leads to infertility and predispose to cervical cancer,

which is considered as frequent cancer among women in India.¹³ Pathologically, it is the replacement of the stratified squamous epithelium of the portiovaginalis by the columnar epithelium of the endocervix.^{12,14-17} Predisposing factors for cervical ectopy are early sexual life, multiple sexual partners, presence of STI's, lower genital tract infections, low socioeconomic status, poor personal hygiene, poor health awareness etc.^{2,7,8,17-19} Etiology includes cervical trauma during delivery,

abortion and sexual intercourse, use of contraception either barrier or steroidal etc.^{10,12,15,18} Although it is benign, but may be troublesome due to its chronicity and nature of recurrence. As the disease takes 10-20 years to progress from pre invasive to invasive disease, preventive measures such as screening and treatment modalities should be adopted.⁸ Thus, an early and accurate diagnosis of cervical ectopy is of paramount importance for its effective management and for prevention of its long-term sequel. ACOG recommend all sexually active women above the age of 18 years, should have an annual pap smear test and pelvic examination. The patient may present with symptoms like vaginal discharge, low backache, dyspareunia, intermenstrual bleeding, post coital bleeding, pelvic pain etc.^{1-3,6,11,14,16,20,23,25,26} The treatment option available in conventional medicine for cervical ectopy is surgical treatment like electro or cryocautery, which though effective, but have their own complications like cramping pain during procedure, copious discharge per vaginum, PID, risk of secondary hemorrhage, cervical stenosis, infertility etc.^{1,3,8,20} Hence, the need for alternate treatment arises which is to be safe, effective and free from side effects. In USM, several drugs are available for healing of cervical ectopy which can be used safely in humool form.

Methodology

Authentic ancient text of Unani medicine was searched to obtain the Unani concept of cervical ectopy. Pub Med/Google Scholar was also searched with the keywords; cervical ectopy, cervical erosion, food items as anti-cancerous, vaginal discharge; low back ache; ointment, Unani drugs having cytotoxic effects, alternative regimes for cervical ectopy, prevention of cervical cancer etc.

Unani concept

The description of cervical ectopy is similar to Quruh al-Rahim or zakhm Wa Juruhe Rahim in classical Unani text.²⁷⁻³¹ Qarha is an arabic word which means wound.³²⁻³⁷ Ulcer is defined as breach in the continuity of epithelial membrane, or chronic loss of continuity in fleshy mass (Ibn Hubal).³⁷⁻³⁹ Majoosi in Kamilus Sana mentioned that ulcer is formed if Tafarruq-I-Ittisal (discontinuity) exists for longer duration.²⁹ Hakim Azam Khan states that Qarha is actually caused by the rupture of an abscess.³⁷ Ibn Sina mentioned that the three main types of Amraze Rahim are Sui Mizaj (altered temperament), Sui Tarkeeb (altered composition) and Amraze Mushtarik (combination of both).³⁰ Further, he cited in Al Qanoon that three basic factors responsible to cause ulcer are: rupture of inflammatory swelling, sepsis in a wound, and corrosive pustules.^{40,41} Ibn Sina states that Quruh al-Rahim may be clear, purulent or non-purulent, inflammatory or non-inflammatory, associated with or without cancrum and can occur within the uterus or other sites as well.³⁰

Etiopathogenesis

It is caused by various external and internal factors.

External factors like wounds due to uterine injury either by direct trauma or instrumentation, drug induced i.e. local use of haad drugs in the form of humool or farzaja and Hikka Al-Rahim.^{27,42} Internal factors like difficult labour, mismanagement of labour, flow of acute yellow bile towards the uterus causing gradual erosion of cervix, rupture of inflammatory swelling or pustules. Seldom, it is congenital.^{27,31-34,42}

Clinical presentation

Patient may present with intense pelvic pain if ulcer is on Fam-I-Rahim, abnormal vaginal discharge headache, pain in thighs (Buqrat), fever, excessive thirst.^{28,30,32-34,43,44} On examination, Qarha on the cervix is visible on inspection and even palpated as rough area on bimanual examination.^{29,42}

Diagnosis

It is based on history and clinical examination.

Oozing of fresh blood after trauma is indicative of uterine ulcer, which occurs due to rupture of epithelium.^{33,34}

If vaginal discharge is scanty, white, thick in consistency, slippery, without smell and pain is indicative of non-purulent ulcer.

If vaginal discharge is blood stained, offensive, purulent associated with mild pain is indicative of purulent ulcer.

If vaginal discharge is black colored, offensive, associated with severe pain, fluctuation and prominent vessels, is indicative of akkala (cancrum).^{30,33,34}

If vaginal discharge is associated with fever and chills and other sign and symptoms of inflammation is indicative of Waram Al-Rahim (PID).

If vaginal discharge is excessive in amount and resembles alcoholic sediments is indicative of rupture of an abscess.^{27-30,33}

Vaginal discharge of Qarha Al-Rahim is purulent and associated with pain, while in Akkala Al-Rahim, the discharge is thick, offensive and black coloured.²⁷

Usoole ilaj

General measures

The main aim in treatment of ulcer is to procure tajfif (desiccation) to diminish mawade fasidah (infected

material) and rutubate raddia (morbid matter), even to stop their further production.

Mujaffifat (desiccants) are indicated in quruhe naqiyya (non-infected ulcer), while akkal (corrosive) drugs are for quruhe afina (infected ulcer) like zaaj (Alum), hartal (Arsenic disulphate), chuna (calcium carbonate) and tutiya (copper sulphate).⁴⁴

Consider the temperament of the body, temperament of the humor accumulated and temperament of organ involved during treatment.^{39,41,44} Correction of temperament of blood is recommended, if wound healing is delayed due to altered blood (Table 1 and 2).

The treatment of wound is different in different organs

1st degree mujaffif adwiya are recommended, if the wound is in moist organ and secretions are scanty. 2nd and 3rd degree mujaffif adwiya are advised, if the wound is in dry organ and secretions are more. Moatadil mizaj mujaffif adwiya are required, if both organ and wound are of normal temperament.

Selection of drugs used for healing of wound are decided based on temperament of body and wound.^{39,41} Mudammile quruh and mulahhim drugs are recommended, if wound is moatadil in rutubat and yabusat.³⁹ If body has moist temperament and affected organ is of dry temperament, then there are two situations: use qawi mujaffifat to produce tajfif, if rutubat is more and use zaef mujaffifat, if yabusat is more.

In the treatment of wound, degrees of mujaffifat must be considered; Jalinoos states that, mujaffifat are included in munbate lehem adwiya, as they help in wound healing with desiccation and formation of granulation tissue.

However, severe desiccation is not mandatory with these drugs e.g.; for tajfif shadeed, mujaffifat are used not for the reepithelization but for scab formation. Further, he quoted that qairooti is Munbit-I-Lehem (helps in granulation tissue formation), but it aggravates pus collection, while zangar act as Mani-I-Taqee (de-obstruent), but increases the irritation thus causes delay in wound healing. Hence, zangar is mixed with qairooti to counteract with each other.^{41,44} Use qabid (astringent) and lazaj (mucilaginous) drugs after tanqiya quruh for wound healing e.g. gile makhtoom.⁴¹ Wounds in fleshy mass require extra care as compared to other organs; even wounds having continuous secretions are more dangerous.

If wound and inflammation occur simultaneously; it is necessary to first treat inflammation, as it delayed the wound healing.³⁹

Specific measures

- Treat the cause (Izaslae sabab).^{27,28,30,36}

- Tanqiya badan with fasde basleeq and use of mushilat.^{28,30,32-34}

Use of habis, qabid, mujaffif, mulahhim and mudammile quruh adwiya is recommended for ulcers of internal organs, which usually heals late if associated with inflammation.³⁹ Moreover, use of these drugs with honey are advised, as honey is considered best for quruh batina.⁴¹

In gynecological diseases, maqami kharji tadabir are more beneficial than dakhli tadabir. Hence, apart from internal drugs, local application of drugs is recommended like use of habis (haemostatic) and qabid (astringent) drugs, in the form of humool or farzaja or huqna, and murakkhhi (relaxant) drugs are contraindicated.^{27,28,30,33,34,43}

Use of mulayyin ashiya, musakkin adwiya followed by adwiya mudammila, if ulcer is due to inflammation.^{27,28} Local application of drugs is beneficial, if ulcer is due to trauma.³⁶

Use murakkabat of mugharri, qabid and mukhaddir adwiya (Table 3).²⁷

Treatment (Ilaj)

Dietotherapy (Ilaj bil ghiza)

Pharmacotherapy (Ilaj bil dawa)

Table 1: Diet allowed and restricted.

Diet allowed	Diet restricted
Light and nutritious diet (to provide strength to the patient) ⁴⁵ like shorba gosht bakri, chapati, khichdi moong daal, milk, fruits and vegetables (palak, khurfa, kaddu)	Spicy ^{32,36} and oily food Jaggery. ³⁶

Table 2: Food items to keep cervix healthy.

Food factors	Food items
Vitamin C	Papaya, kiwi, pepper, orange, broccoli, brussels, sprouts, grape fruit, straw berries ^{46,47}
Selenium	Brazil nuts, fish, barley, shrimp, lamb, scallops ⁴⁸
Vitamin E	Sunflower seeds, almonds, spinach, turnip green, papaya, mustard, asparagus ^{48,49}
Carotenoids	Carrots, tomatoes, sweet potato, pumpkin, spinach ^{48,49}
Essential fatty acids (EFAs)	Pure fish oil, flax seed oil ^{48,49}
Folate	Lentils, spinach, beans, asparagus ⁵⁰

Table 3: Drugs indicated with their forms of administration.

Drug administration	Unani formulations with ingredients	Indication
Aabzan	Aabe qumqum ³⁴	Mismanagement of labour
Douche	Barge neem 60g, Kameela 6g ³⁶	
Huqna	Roghane gul, Roghane zambaq/ Marham basaliqoon ^{29,33,36}	Rupture of pustules and associated with pus discharge
	Roghane gul, roghane banafsha & sugarcane juice ³³⁻³⁵	
Humool	Charbie batt, charbie murgh each 20g; Aqaqiya, safeda qalai, murdar sang maghsool, kateera, khatmi each 3.5g; roghne gul/ banafsha ³⁰	If ulcer is due to use of haad drugs
Douche	Honey water initially, then joshanda irsa ²⁸	Infected ulcer
Humool	Ointment: safeda, murdarsang, mom, roghane gul, marham tutiya ²⁷	Deep ulcer
Humool	Aarade jau, gule khatmi, aarade baqla, tukhme katan, akleel, khubbazi, hulba, gule banafsha, murdar sang, damul akhwain, safeda each 4g, kafoor 1 g, baizae murgh 2 in no., roghane gul 24g ³⁰	Associated with waram haar and salabat
Humool	Marzanjosh, anabus salab, tukhme maru, isapghol, babuna, gule surkh each 4 g, zafran, Jund bedastar each 1g ³⁰	Associated with Waram barid and salabat
Orally	Prepare decoction of gule khatmi-3 g, mawez munaqqa 10 in no., boil in arqe aanabus salab, filter and add shera tukhme kaknaj-4g and sharbate tukhme khashkhash-24 g; sprinkle 4g of tukhme rehan and bartang before using the formulation ³⁰	Severe pain
Zimad	Khatmi, baqila- boil in honey water with roghane gul ³⁰	
Huqna	Roghane gul with lukewarm water ³⁰	
Farzaja	Afyun, zafran, milk ³⁴	
Orally	Qurse kahruba ^{30,34}	
Farzaja	Kundur, anzaroot, damul akhwain, jozsaru, poste anar, shibe yamani, murrmakki, gule surkh are finely powdered and mixed with aabe bartang or aabe aas or aabe lal saag ^{30,33,34}	If ulcer is associated with blood stained discharge
Huqna	Gile armani, aqaqiya, mazu, ramak are added to nuskhah farzaja habisa ^{30,34}	
	Aabe jau, shehed mixed with marham basaliqoon and roghane sosan. Honey and pea flour mixed with roghane sosan.	
	Joshanda methi, matar, masoor (khatmi and sabuse gundum are added in separate poultice and boiled together); 96.250 g of this mixture is taken and blend with shehed-35 g, roghane susan-17.5g and phitkiri-4.5 g. ²⁹	
Zimad	Annabus salab, gule khatmi, ardejau, isapghoul, tukhme rayhan, rasuat- each 4 g, finely powdered and filtered; and mixed with aabe annabus salab, roghane gul and sirka ³⁰	Associated with pus
Huqna	Roghane gul, roghane banafsha, ma'al sukr or ma'al asal ^{30,34}	
Douche	Ma'al asal ³²	
Humool	Roghane gul with marhame basaliqoon ^{30,34} Once the wound is healed, use same tadabir as those of quruhe mathana wa gurda ³⁴	
Huqna	Aashe jau	If madda is haad and akkal
Huqna or farzaja	Barid adwiya like habbul aas, gulnar, kazmazaj with roghane gul ³³	
Sites of uterine ulcers		
Orally	Qurse kehruba with aabe bartang ³⁰	If ulcer is fresh and on fam-i -rahim occur due to trauma or rupture of epithelium with oozing of blood
Abzan	Aabe qumqum ^{29,30,34}	
Farzaja	Kundur, anzaroot, damul akhwain, each one part is finely powered and add small quantity in aabe lalsaag and aabe bartang.	
Humool	Acquire phitkiri, jozesaru, poste anar- each one part, murrmakki -half part; finely powdered and mix with aabe aas and aabe barge saru, later on add equal	

Drug administration	Unani formulations with ingredients	Indication
	quantity of poste anar ²⁹	from the wound
Douche	loabe isapghoul, tukhme khatmi, gule maru -each 7g, roghane gul-12 g, aqaqia, gulnar, shakhe gauzan sokhta, kaghaz sokhta, post baize murgh sokhta, noful kohna sokhta, damul akhwain - each 3.5g mixed in aabe bartang and aabe qumqum ³⁰	
Huqna	Aabe aas, aabe shakhe noorista, gulab, aabe bartang, aabe lalsaag -each one part, acquire 96.250g of this mixture and insert safoof gile armani, aqaqiya, ramak, mazu, usara lahiyya al-tees -each 3.5 g and sprinkle joz buwa-1.75 g ²⁹	
Orally	Qurse kehruha with aabe bartang.	Ulcer is on qa'a al
Locally	Gile armani, aqaqiya, mazu, ramak and aabe qumqum in the form of huqna with nuskha farzajae habisa ^{30,33,34}	rahim
Treatment according to stages of wound healing		
In initial stage of wound		
	Apply qairooti prepared from murr, safeda, anzaroot, mom and roghane gul with zangar ²⁸	Purulent ulcer
Once the wound starts healing		
Humool	Apply qairooti prepared from tootiya maghsool (copper sulphate)-2 part, aqleemiyae fazly, safeda, anzaroot- each one part with mom and roghane gul ²⁸	
Fateela	Sibr zard 7 g, sangebasari maghsool, murdarsang, gulnar, geru each 2 g, kundur 0.5 g, post kaddu talkh sokhta 1 g; finely powdered similar to surma and add aabe kishneez sabz, use two fateeley per vaginum daily ^{30,33}	
Shayaf	Initially use shaffa of honey to clean the wound, then apply shaffa of mazu for healing of wound; finally use shaffa of zard chob and roghane gao or ³⁰ roghane zard for complete elimination of inflammation as well as wound. ^{30,33}	
Humool	Decoction: Usarae hina or safoof barg hina or javitri or butter or extract of anar tursh cooked with its bark and pure honey.	
Aabzan	Decoction of habbul aas ³³	
Huqna	Roghane bahi ³³	
For cleaning and healing of quruh al-rahim:		
Humool	Prepare marham from maghz tukhm kaddu biryan, maghz tukhm tarbooz biryan (each 4 g), damul akhwain, murdarsang, gulnar grinded in sirka, tootiya maghsool, barge hina, post kaddu sokhta (each 1g), safedi qalai (2 g); finely powdered and mix mom safed 2 g and roghane gul 12 g ³⁰	
	Marham of murdar sang, safeda, gulnar, mom and roghane gul. ⁵¹	
	Rasaut, murdar sang, kaat safed, mazu sabz, sangejarahat; all in equal quantity, finely powdered and mix safedi baizae murgh.	
	Marham basliqoon (zaft, rateenaj each 84 g, behroza 18 g with roghan)	
	Marham dakhliyun (roghane zaitoon kohna 144 g, murdarsang 72 g, tukhme khatmi, tukhme maru, tukhme katan, isapghoul, methi each 24 g; acquire luab of all these drugs and finely add powdered murdar sang with roghane gul). ³³	
	Murdar sang, geru, sange jarahat each 1g, finely powdered and use with marham kafoori 24 g ³⁶	

Regimonal Therapy (Ilaj Bil Tadbeer)

General advice

Adequate rest, avoid contact with heat and abstain from sexual intercourse.³⁶ Use diet according to mizaj.²⁸

Tadabeer recommended

Fasd (venesection), talyin (laxation) and ishal (purgation) to prevent insababe rutubat in quruh apart from other benefits.⁵²

Takmeedat, nutulaat, zimadat, atlia, aabzan, bukhoor, maqami malish, pichkari, humool, shayaf, farzaja, amale kaiyy etc.³⁸

Fasd is recommended apart from intake of heavy diet, if wound is infected and associated with Kathrat-I-Fudlat; more intake of liquid diet is advised, if the wound is non infected due to ghalba yabusat.³⁹

Humool and farzaja are specially recommended for maqami zakhm and jaryane dam.⁴³

Table 4: Evidence based medicines for cervical ectopy.

Sr. No.	Drug	Botanical name	Chemical constituents	Pharmacological actions
1.	Babuna 	<i>Anthemis nobilis</i> (Chamomile)	Water, volatile oils, sesquiterpenes, steroids, flavonoids, alcohol, coumarines, phenolic acids, triterpenes, polysaccharides.	Antimicrobial, cytotoxic, anti-inflammatory, insecticidal, hypotensive, hypoglycemic, antioxidant ⁵⁶
2.	Zaitoon 	<i>Olea europea</i>	Oleuropein (coumarin like compound), biophenols, flavonoids, pentacyclic, triterpenes, MUFAs, PUFAs	Antioxidant, anticancerous, anti-inflammatory, anti-viral, anti-diabetic, anti-convulsant, antibacterial ⁵⁷⁻⁶⁰
3.	Khatmi 	<i>Althaea officinalis</i>	Phenolic acid, flavonoids, pectin, starch, coumarins, mucilage, glycosides, tannin, phytosterol, amino acids	Cytotoxic, anti-inflammatory, hypoglycemic, antioxidant, immune stimulant, antimicrobial ⁶¹⁻⁶³
4.	Aqaqia 	<i>Acacia arabica</i>	Tannins, gallic acid, galactone, digallic acid	Haemostatic, antiulcer, anti-diabetic, antibacterial, antiviral ⁶⁴⁻⁶⁶
5.	Zafran 	<i>Crocus sativus</i>	Terpenes, alcohols and their esters	Anti-proliferation induction of apoptosis ⁶⁷
6.	Neem 	<i>Azadirachta indica</i>	Limonoids (Azadirachtin)	Anti-inflammatory, antiulcer, antioxidant, hepatoprotective, anti-cancer, antimetastatic ⁶⁸
7.	Murr makki 	<i>Commiphora myrrha</i>	Volatile oil, resin, gum, alkaloids, phenol, tannins, flavonoids, glycosides, steroids, saponins, terpenoids, carbohydrates, organic compounds and minerals.	Antiseptic, antifungal, antibacterial, cytotoxic, analgesic, antiviral, anti-inflammatory, bacteriostatic, astringent, expectorant, carminative, stimulant, stomachic, leucocytogenic, aphrodisiac, diuretic, deodorant, ophthalmic, antispasmodic, anti-dermatophyte ⁶⁹⁻⁷¹
8.	Safeda Kashghari 	<i>Plumbi carbonas</i>		Antispasmodic, anticancer, seminal stimulant; locally as sedative, astringent, anaesthetic, haemostatic. ⁷²

9.	<p>Anzaroo</p> 	<p>Astragalus sarcocolla Dymock</p>	<p>Saponins, flavonoids, polysaccharides, alkaloids, anthraquinones, amino acid, beta sitosterol and metallic elements.</p>	<p>Gum: anti-inflammatory, antiviral, bactericidal, anti-diabetic, antioxidant, cardio protective, hepatoprotective, antidepressant, hypotensive, sedative, wound healing, immunomodulatory, aperient, emollient, anti-rheumatic, anti helminthic, laxative, cardio tonic. Roots of genus exhibit anti-perspirant, tonic, diuretic and wound healing properties⁷³⁻⁷⁴</p>
10.	<p>Roghane gul (Rose oil)</p> 	<p>Gulesurkh taza (Flower of Rosa damascene Mill.) Roghane kunjad muqashshar (Oil of Sesamum indicum L.)</p>	<p>Terpenes, glycosides, Flavonoids, nerolanthocyanins, nonadecane, beta citronellol, geraniol, carbohydrates.</p>	<p>Antibacterial, antifungal, anti-infective, anti-inflammatory, wound healing, analgesic, hypnotic, anti-depressant, anti-anxiety, anti-convulsant, antispasmodic, cytotoxic, astringent, disinfectant, hypotensive, tonic⁷⁵⁻⁷⁷</p>
11.	<p>Poste anaar</p> 	<p>Punica granatum</p>	<p>Flavonoids, tannins, phenols</p>	<p>Cytotoxic, anti-oxidant, anti-inflammatory, analgesic, antifungal⁷⁸⁻⁷⁹</p>
12.	<p>Banafsha</p> 	<p>Viola odorata</p>	<p>Flavonoids, saponins, glycosides, vit A and C, monoterpenes.</p>	<p>Cytotoxic, anti-oxidant, anti-inflammatory⁸⁰⁻⁸¹</p>
13.	<p>Kundur</p> 	<p>Boswellia serrata</p>	<p>Monoterpenes, diterpenes</p>	<p>Anti-inflammatory, anti-oxidant, antimicrobial⁸²⁻⁸³</p>
14.	<p>Shibe yamani</p> 	<p>Alum</p>		<p>Antiseptic, anti-haemorrhagic, antimicrobial, ulcer healing activity⁸⁴</p>
15.	<p>Mom</p> 	<p>Cera alba (white bees wax) Cera flava (yellowbeeswax)</p>	<p>Myricin, free fatty acids, myricylstearate, cerolin, cerylalcohol, hydrocarbons, lactones, cholesterol esters, pollenpigments, flavonoids, palmitate, palmitoleate and oleate esters of long chain aliphatic alcohol</p>	<p>Antifungal, antiulcer, antioxidant, anti-inflammatory, antimicrobial, anti-stress, gastroprotective⁸⁵⁻⁸⁶</p>
16.	<p>Shehed</p> 	<p>Honey</p>	<p>Flavonoids, lysozymes, phenolic acids, carbohydrates, fructose, vit B and C, minerals</p>	<p>Antioxidant, antibacterial, wound healing activity, antifungal, anti-inflammatory, anti-viral, anticancerous⁸⁷⁻⁸⁸</p>

Farzaja and huqna are more beneficial than mulayinat, especially in amraze rahim.³⁰

Amale kaiyy bil naar (cauterization) is recommended, if the drugs fail to heal the ulcer.⁴⁴

Tadabeer contraindicated

Hammam is contraindicated in quruh, as it drains mawad towards the wound, particularly in darjae ibtida and tadhayyad.^{39,40,52}

Amal-I-Kaiyy (cauterization)

Kaiyy is an arabic word which means to cauterize. It is extracted from Unani word Kaiein meaning to burn. Amal-i-Kaiyy is a procedure in which caustic substance; red hot metal rod, electric current, fire etc. are used to burn the flesh in order to dry the excessive fluid, to stop bleeding, to remove the putrefied flesh etc.

The oldest reference of cauterization was found in surgical papyrus in 1600 BC for the treatment of ulcer and tumors. This remedy is considered to have ḥar-yabis effect, thus most effective for the diseases caused by mizaj-i-barid-raṭab.⁵³ It is considered as best treatment option not only for tanqiya badan, but for mujaffif rutubat also, if medicine are not effective to cure it.^{5,44,62}

Types of cauterization: Amale kaiyy is of two types:

- Kaiyy bil naar (cauterization with fire), where the tissues are burned with fire.
- Kaiyy bil adwiya (cauterization with corrosive drugs), where hawamize kaviya (escharotic acids) and borqiyaat (salts) are used for burning, which leads to the formation of blisters.⁴¹

Kaiyy bil naar is preferred over kaiyy bil adwiya as fire does not involve the adjacent organs and has no harmful effects.

Ibn Sina recommended that gold metal should be used for cauterization. Razi, with the reference of Jalinoos, suggested that the best metal for cauterization is pure gold because no bulla formation at cauterization site, and even if it forms get cured soon.⁵⁵ Zahrawi has a different view about the selection of metal for cauterization.

He recommends iron as the best metal for it on the basis of following points.

- It is very difficult to assess the approximate temperature of gold even if it becomes red on heating.
- Gold metal get cool soon in comparison to iron as its consistency is less than iron.
- Gold is soft in consistency; thus, it bends or breaks due to the pressure in comparison to iron.

- Iron has a quality to strengthen the overall organs of the body.^{53,54}

Gynecological indications

Uterus: sui mizaj barid rataḥ sada or maddi, infertility, amenorrhea, painful menses, alteration in menstrual blood flow etc.^{54,55}

Amal-I-Kaiyy Jamdi (cold cauterization)

This is similar to cryo cautery. It is mainly used for cervical ectopy and usually performed in patients having excessive vaginal discharge and also indicated in bleeding, chronic wounds, warts etc. Here, the application of any substance such as liquid nitrogen, carbon dioxide or a very cold instrument is used for the destruction of tissues by freezing. As the temperature is kept at - 800C, hence it has to be performed carefully.⁵³

Advantages of cauterization

Prevents the spread of infection to other healthy organs, dissolves mawade fasida, eliminates leHEME fasida (corrupt flesh), which fails to soften with medicines, arrests jiryān-ud-dam, to treat a non-healing ulcer, and for tajfif-i-quruh.^{41,54}

DISCUSSION

Cervical ectopy is one of the commonest gynecological condition seen in OPD's, in women of reproductive age group. Although it is benign, but may be troublesome due to its chronicity and nature of recurrence. In conventional medicine, surgery in the form of cryocautery or electrocautery is the only treatment option for it. While in USM, Various drugs are available which can be used as topical application in the form of douche, pessary, etc., exhibiting anti-microbial, anti-inflammatory, anti-oxidant, anti-cancer, anti-ulcer, analgesic, wound healing activities due to the presence of flavonoids, saponins carbohydrates, alkaloids etc; which are considered as the active principle of anti-ulcer activity (Table 4).

Hence, these Unani drugs must be used in day to day clinical practice due to their beneficial effects since ancient times as mentioned in the literature. Further, randomized controlled trials on large sample size are recommended to proof the efficacy and safety of these Unani drugs in the management of cervical ectopy.

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