

Effects of Herbal formulations in management of Uterine Fibroid (*Sul'ah-E-Rehm*) – A Case Report

Mohammad Shamim Khan,^{1*} Shaikh Imran,² Mobashshera Khan²

^{1*} Unani Medical Officer, Government Unani Dispensary, Kota, Department of Unani Medicine, Rajasthan, India

² Medical Officer Unani, Directorate of AYUSH, GNCT of Delhi, India

Abstract:

Uterine fibroid is the commonest benign and solid tumor in female during reproductive life. Approximately 15-25 million of Indian women have affected from fibroid uterus. Histologically it is composed of smooth muscle and fibrous connective tissue of varying proportional. It is considered as *Sul'ah* (tumor) in Unani classic literature, as *Ali Ibn-e-Abbas Majusi* (930-994 AD) defined it under the topic of *Warm-e-Balghami*; as it is a swelling filled with viscid phlegm (*Balgham-e-Ghaleez*). Present paper deals with a reports of a 30 years old female having uterine fibroids measuring 2.6 cm × 3.1 cm, 2.6 cm × 3.6 cm, with left ovarian cyst of 3.1 cm × 4 cm. Patient was treated with herbal formulations; *Majun Dabeedul Ward* (5 gm paste), *Kanchanar Guggul* (2 tablet) and *Niswani* (10 ml syrup) twice a day for 8 consecutive weeks as oral administration. The patient was clinically assessed fortnightly, and radiologically just after treatment. Patient has shown encouraging result in post treatment investigation of Ultrasonography and finally patients got free from uterine fibroids without operation. The drugs were found to be safe and effective in this case.

Keywords: *Kanchanar Guggul, Majun Dabeedul Ward, Niswani, Sul'ah-e-Rehm, Uterine Fibroid*

Received: 15.05.2021 Revised: 18.06.2021 Accepted: 24.06.2021 Published: 28.06.2021

Quick Response code



*CORRESPONDING AUTHOR:

Dr. Mohammad Shamim Khan

Unani Medical Officer, Government Unani Dispensary, Kota, Department of Unani Medicine, Rajasthan, India

E-mail : drshamimmd@yahoo.co.in

Introduction:

Uterine fibroid known as leiomyoma, myoma or fibromyoma, is the commonest benign and solid tumor in female. It has been estimated that at least 20 percent of women at age of 30 have got fibroid in their wombs. The prevalence is highest between 35-45 years of age.^[1] Approximately 15-25 million women in India have affected from fibroid uterus.^[2] Histologically it is composed of smooth muscle and fibrous connective tissue of varying proportional. Originally it consist of only muscle element but later on fibrous tissues intermingle with the muscle bundle. It arises from the single smooth muscle cell of myometrium.^[1] Chromosomal abnormality particularly the chromosome six or seven (rearrangement, deletion) and somatic mutations in myometrial cells may cause uncontrolled cell proliferation. Epidermal growth factor, insulin like growth factor-1, transforming growth factor, stimulates the growth of leiomyoma directly or via estrogen.^[1] Nulliparity, obesity, hyperestrogenic state and black women are implicated to be high risk factors for uterine fibroid. It has various types such as interstitial or intramural (75%), subperitoneal or subserous (15%) and submucous (5%), are located in the body of uterus, and fibroid in cervix of uterus is rare (1-2%).^[1] Clinically it represented as usually asymptomatic (75%) however can reflects pelvic pain, pelvic lump, infertility, menstrual abnormality; menorrhagia, metrorrhagia, dysmenorrhea, recurrent pregnancy loss; miscarriage, preterm labor, pelvic pressure; urinary frequency, urinary incontinency, dysuria, constipation.^[2] Ultrasonography is a non-invasive useful diagnostic tool to confirm the size, number and location of Uterine fibroid.^[1]

According to Unani medicine uterine fibroids considered as *Sul'ah* (tumor), may be defined as viscid phlegmatic inflammation, enveloped by a sac of membranous tissue.^[3] Razi (860-925) has advocated that *Sul'ah* is a phlegmatic

tumor consisting of putrefied phlegm. Its sizes vary from Bengal gram to water melon.^[4] *Ali Ibn-e-Abbas Majusi* (930-994 AD) mentioned it under the heading of *Warm-e-Balghami*; as it is a swelling filled with viscid phlegm (*Balgham-e-Ghaleez*). It is classified into 4 types; *Shahmiyah* (fat like), *Asliyah* (honey like), *Ard'haliyah* (flour like), *Sheeraziyah* (milk like). It is treated by adopting of concoction and expulsion of the abnormal phlegm (*Nuzj-o-Tanqiyah-e-Balgham-e-GhairTab'yiah*) along with anti-inflammatory drugs (*Muhallil-e-Warm Advia*) orally as well as topically in the form of *zamad* (paste) and *Marham* (ointment). If it is failed then surgical removal is the treatment of choice.^[5] *Ibn-e-Sina* (980-1037AD) described it under the topic of *Sul'ah* (tumor); known as *Dunbula-e-Balghami*, characterized by a lump filled with abnormal phlegm (*Ghair Tab'yi Khilth-e-Balgham*), which may be bloody or honey like viscid.^[6]

Although the definite treatment of uterine fibroid is surgical removal in both Modern and Unani medicines, but keeping in view of Unani concept regarding etiopathogenesis of *Sul'ah* (tumor), it is treated medically by herbal drugs having *Dafey-e-Sul'ah* (antitumor) *Munzij-e-Balgham* (concoctive of phlegm), *Mus'hil-e-Balgham* (purgative of phlegm) and *Muhallil-e-Warm* (anti-inflammatory) properties.

Case History:

A 30 years old married female patient suffering from uterine fibroid, visited to Govt. Unani Dispensary, Bheemganj Mandi, Kota, Department of Unani Medicine, Rajasthan, India, for treatment. She had chief complaints of severe pain and heaviness in lower abdomen associated with per vaginal irregular profuse bleeding, low back pain, incontinence and increased frequency of urine since last 7 months. She got married 4 years ago but still had no child, complaining infertility. She had a

history of surgical removal of right ovary 2 years ago due to polycystic disease. The diagnosis was confirmed by Ultrasonography (USG) of abdomen and pelvis. Findings were suggestive of right lateral wall fibroid measuring 2.6 cm × 3.1 cm, and posterior wall fibroid measuring 2.6 cm × 3.4 cm in uterus (Figure-1 & Figure-2). The follow up observation was 2 weeks. The duration of study was 8 weeks. Informed written consent has been taken from the patient prior to the treatment.

Therapeutic intervention:

The patient has been advised to take 5 gram of *Majun Dabeedul Ward* and 2 tablet (500 mg) of *Kachnar Guggulu* with plain water on empty stomach at morning & evening, and 10 ml of *Niswani* after meal twice a day orally. *Majun Dabeedul Ward* is an Unani pharmacopeal compound drug, marketed from GMP certified company Hamdard and prepared according to *Bayaz-e-Kabeer* Volume-2, while *Niswani* syrup; a patent Unani drug marketed from Dawakhana Tibbiya College, Aligarh.^[7-8] *Kanchanar Guggul* is a classical Ayurvedic formulation, marketed from Dhootpapeshwar Ltd.^[9]

Images of USG Findings:

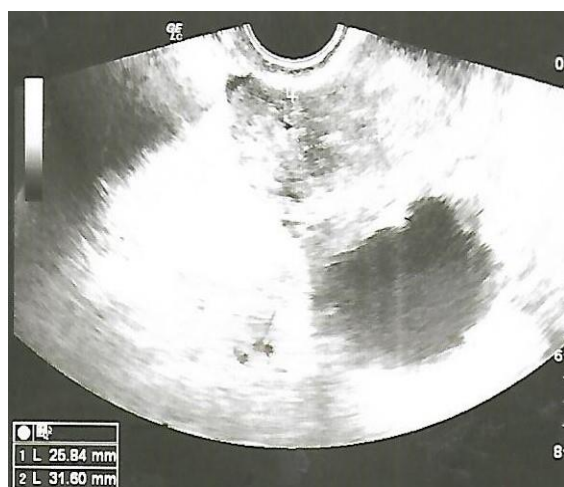


Fig-1: Showing a fibroid at lateral wall of uterus

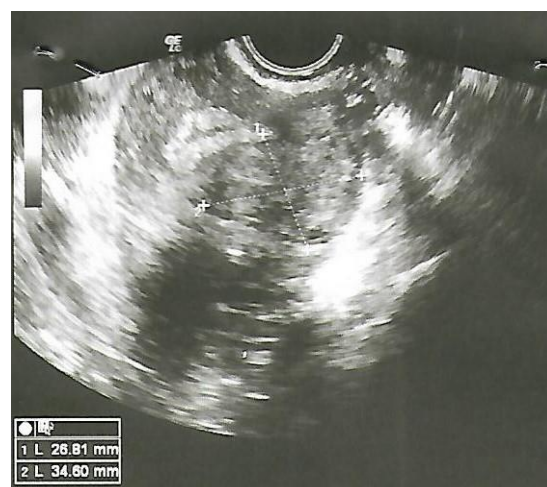


Fig- 2: A fibroid at posterior wall of uterus

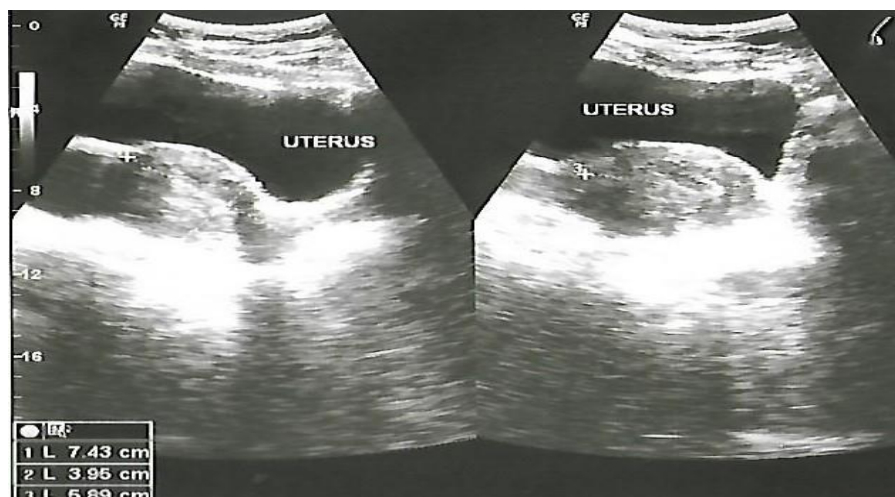


Fig- 3: Showing Normal Uterus

Results and Discussion:

The improved response was excellent and significant clinically as well as radiologically. The patient reported that, clinical characteristics including lower abdominal pain, per vaginal excessive bleeding, low back pain, incontinence and increased frequency of urine were disappeared and her monthly menses were regularized after treatment. Eventually, uterine fibroids have completely resolved after 8 weeks of treatment on USG scan findings were impressive of normal (Figure 3). All prescribed medicines were found to be safe and effective.

The beneficial actions of prescribed herbal medicines can be attributed to the presence of complex spectrum of actions including *Dafey-e-Sul'ah* (antitumor) *Munziji-e-Balgham* (concoctive of phlegm), *Mus'hil-e-Balgham* (purgative of phlegm) and *Muhallil-e-Warm* (anti-inflammatory) activities in their ingredients.

Majun Dabeedul Ward is recommended in inflammation and the swelling of uterus.^[7, 10] Khan studied a case of left ovarian cyst of 4 centimeter and 8 millimeter in size was treated with *Majun Dabeedul Ward*, *Arq Kasni*, and *Niswani*, as oral administration. Study showed excellent result in post treatment USG scan finding were evocative of cyst was dissolved without operation.^[11] *Gul-e-Surkh* (*Rosa damascene*) is the major constituent of *Majun Dabeedul Ward*, possess anti-inflammatory and analgesic activities. It is reported that hydroalcoholic extract of *Rosa damascene* has a potent analgesic effect in acetic acid and formalin tests in mice, may caused by quercetin and kaempferol.^[12] Other chief constituent is *Zafran* (*Crocus sativus*) have anti-proliferative, anti-tumor and antioxidant activities. Aung et al studied the anti-proliferative effect of *Crocus sativus* extract and its major constituent, crocin on three colorectal cancer cell lines (HCT-116, SW-480, and HT-29). It was observed that the proliferation was reduced most significantly in

HCT-116 cells (to 45.5%) at 1 mg/ml and (to 6.8%) at 3 mg/ml. Crocin at 1 mM, significantly reduced HCT-116, SW-480, and HT-29 cell proliferation to 2.8%, 52%, and 16.8%, respectively ($p < 0.01$). Since 3 mg/ml *Crocus sativus* extract contained approximately 0.6 mM crocin, the observed effects suggest that crocin was the major responsible constituent in the extract. Significant anti-proliferative effects were also observed in non-small cell lung cancer cells.^[13] Nair et al studied the antitumor activity of saffron (*Crocus sativus*) extract against intraperitoneally transplanted sarcoma-180 (S-180), Ehrlich ascites carcinoma (EAC) and Dalton's lymphoma ascites (DLA) tumours in mice. It was resulted that oral administration of 200 mg/kg bw of the extract increased the life span of S-180, EAC, DLA tumour bearing mice to 111.0%, 83.5% and 112.5%, respectively. The same extract was found to be cytotoxic to P38B, S-180, EAC and DLA tumour cells in vitro. Thymidine uptake studies indicated that the effect was mediated via inhibition of DNA synthesis.^[14] Antioxidant activity was mainly attributed to carotenoid and flavonoid compounds, notably glycosides of crocin and kaempferol. Crocin and kaempferol in dried petals were 0.6% and 12.6 (w/w).^[15]

Kanchanar Guggul is indicated in fibroid, cyst, lymphadenopathy, fistula in ano, metabolic disorder like obesity and hypothyroidism, deep vein thrombosis and recurrent blood clots.^[9] Dhiman studied multiple case of uterine fibroid with the treatment of *Kanchanara Guggulu*, *Shigru Guggulu*, and *Haridra Khand*, was found to effective as fibroid was absent after 7 weeks of treatment in USG scan.^[16] The main components of *Kanchanar Guggulare Guggulu* (*Commiphora mukul*), *Kanchanar* (*Bauhinia variegata*), *Shunthi* (*Zingiber officinale*) and *Maricha* (*Piper nigrum*) have anti-tumor and anti proliferative activities. Bharti et al investigated the effect of

Comiphora mukul and its constituent Guggulsterone (GS) on oral cancer cell lines (SCC-4, KB). It was showed that C. Mukul and GS significantly inhibited tumor cell growth, caused cell cycle arrest and apoptosis in both tumor cells. Such activities mediated via down regulation of cyclin D1, expression of NF-K β , and restoration of p53.^[17] Myrrhanone C, a bicyclic tri-terpenoid isolated from the C. mukulgum resin, has been chemically transformed to synthesize a series of ten novel pyrimidine hybrids and evaluated for their anti-neoplastic potential against a 6 cancer cell lines namely A-549 (lungs), Hela (cervical), MCF-7(breast), ACHN (renal), COLO-205(colon)and B-16 (mouse melanoma) by employing MTT assay. Synthesized compounds displayed significant anticancer activity against all the cancer cell lines tested.^[18] Pandey investigated the antitumor potential of extracts from different parts of Bauhinia variegata against b16f10 melanoma tumor in c57bl/6 vivo model. It was observed that hydromethanolic extracts of leaf, stem bark and flower of Bauhinia variegata, at the dose of 500 and 750 mg / kg of body weight, significantly reduced melanoma tumor volume.^[19] This effect may be attributed to the presence of polar phytoconstituents such as alkaloids, flavonoids, tannins, terpenoids, and glycosides present in the crude extract of B. variegata.^[19] Camargo et al studied the antitumor potential with extract of Zingiber officinale showed a cytotoxic effect for human kidney tumor cell with no harm effect for the normal cells. This effect may be due to the bioactive compounds of Z. Officinale phenolics compounds, total flavonoids, yellow flavonoids and anthocyanins.^[20] Yoo et al investigated the potential antitumor effect of piperine; a major major pungent alkaloid of Piper nigrum on human melanoma cells in vitro and in vivo. It was showed that treatment of mice for 4 weeks with piperine inhibited tumor growth without apparent toxicity and increased the expression of apoptotic cells and

cleaved-caspase-3 protein and reduced the expression of phospho-ERK1/2 protein in melanoma tumours.^[21]

Niswani Syrup is highly efficacious in the irregularities of menstrual cycle, leucorrhoea, ovulatory disorder and other disorders of uterus. It tones up the nerve and regulates menstrual functions. It removes pelvic inflammatory disorder.^[8] Wang et al examined the cytotoxic and antitumor effects of Curzerene from Curcuma longa (*Haladi Zard*) in both in vitro and in vivo models. It was showed that tumor growth was significantly inhibited the proliferation of SPC-A1 human lung adenocarcinoma cells line by using curzerene (135 mg/kg daily), this effect is mediated via down regulation of GSTA1 protein and expressions of mRNA.^[22] *Post-e-Amaltas* (Cassia fistula bark) possess anti-inflammatory and antioxidant activities. It is reported that the aqueous (CFA) and methanolic extracts (CFM) of the Cassia fistula bark extracts showed significant radical scavenging by inhibiting lipid peroxidation; may be due to presence of polyphenolic content.^[23] *Post-e-Arjun* (Terminalia arjuna bark) also possess antioxidant, anti-inflammatory and immunomodulatory activities. It is studied that aqueous extracts of T. arjuna showed significant inhibition activity of CYP3A4, CYP2D6 and CYP2C9 enzyme.^[24] *Ashoka* (Saraca indica) dried bark is used as a tonic or stimulant to the endometrium and ovarian tissue.^[25] *Khurma* (Phoenix dactylifera) possesses anti-neoplastic effect. Ishurda et al observed a dose dependent anticancer activity with an optimum activity at a dose of 1mg/kg of body weight in mice bearing sarcoma – 180 solid tumors. This effect may link with (1 – 3)- β -d-glucon.^[26] *Munagga* (Vitis vinifera) *Izkhar Makki* (Cymbopogon jwarancusa), *Agar Hindi* (Aqularia agallicha), *Darchini* (Cinnamomum zeylanicum), *Qust shirin* (Saussurea hypoleuca), *Khulanjan* (Alpinia

galanga) and *Filfil Siyah* (*Piper nigrum*) referred as *Munzij-e-Balgham* (concoctive of phlegm) drugs, as these cause softening of the swelling which contains viscid or abnormal phlegm, by making it able to expel out from the body.^[27] *Sibr-e-Zard* (*Aloe barbadensis*), *Haladi Zard* (*Curcuma longa*), *Revand Chini* (*Rheum emodi*) act as *Mus'hil-e-Balgham* (purgative of phlegm) drugs; cleanse or evacuate of the body from viscid or abnormal phlegm which is the main cause of *Sul'ah* (fibroid) as per description of *Ali Ibn-e-Abbas Majusi*.^[5,27] *Gul-e-Surkh* (*Rosa damascene*), *Zafran* (*Crocus sativus*), *Izkhar Makki* (*Cymbopogon jwarancusa*), *Gul-e-Ghafis* (*Gentiana dahurice*), *Haladi Zard* (*Curcuma longa*) and *Shoneez* (*Nigella sativa*) obtained as *Muhallil-e-waram* (anti-inflammatory) drugs; resolve the swelling by reducing inflammation and relieve in pain.^[27]

Conclusion:

On the basis of this single case study it is concluded that herbal formulations; *Majun Dabeedul Ward*, *Kanchanar Guggul* and *Niswani* are effective in the treatment of uterine fibroid (*Sul'ah-e-Rehm*), as resolved with significant improvement in symptoms associated with fibroid. Hence these herbal drugs could be useful in uterine fibroid (*Sul'ah-e-Rehm*) as medicinal treatment option to avoid surgery.

Limitation of Study:

Further clinical study is required to evaluate the efficacy of the drugs at large sample sizes.

Consent of patient:

Informed written consent has been taken from the patient prior to the treatment as well as for publication without discloses the identity of patient.

References:

1. Konar H, DC Dutta's Text Book of Gynecology, Benign Lesions of the Uterus. Jaypee Brothers Medical Publishers (P) Ltd, New Delhi. 6th edition, 2013, p-272-283.
2. D'cruz AJ, Gandhi GA, Damodhar S, Narasimhaiah B, Standard Treatment Guidelines Obstetrics & Gynecology. Ministry of Health & Family Welfare, pp; 5-12.
3. Kabeeruddin H. Moalijat Sharah Asbaab (Tarjama-e-Kabeer). 3rd vol, Ejaz Publishing House, New Delhi: 1999. P-280.
4. Bano SN, Salae Raham and its Management with Naushader, National Institute of Unani Medicine, Bangalore, 2007, p-1-93.
5. Majoosi AIA. Kamil-us-Sana'ah. Urdu Translation by Ghulam Husain Kantoori. 1st volume. Idarah Kitab-us-Shifa, New Delhi: 2010. p- 426-27.
6. Ibn-e-Sina AAIAH. Alqanoon Fit Tib. Urdu Translation by Syed Ghulam Husain Kantoori. 3rd vol. Idarah Kitab-us-Shifa, New Delhi: 2010. Pp1272-74.
7. Anonymous, Disease & Treatment. Hamdard (waqf) Laboratories (India), New Delhi. 2009. p-31.
8. Anonymous, Therapeutic Index: Dawakhana Tibbiya College Aligarh. Muslim. Educational Press, Aligarh. 2002. pp- 65.
9. Anonymous, Medicine Guide Book: Shree Dhootpapeshwar Ltd, Mumbai. 2018. pp-13-14.
10. Kabeeruddin HM. Beyaz-e-Kabeer. 2nd vol. Hikmat Book Depo, Haiderabad Deccan: 2004. p 132.
11. Khan MS. Effect of Unani Formulations on Ovarian Cyst (*Keesa-e-Khusyat-ur-Rehm*) – A Case Report. IJSRR 2019;8(2): 4034-4040.

12. Hajhashemia V, Ghannadib A, Hajilooa M. Analgesic and Anti-inflammatory Effects of Rosa damascene Hydroalcoholic Extract and its Essential Oil in Animal Models. *Ira J Phar Res* 2010; 9(2):163-68.
13. Aung HH, Wang CZ, Ni M, Fishbein A, Mehendale SR, Xie JT, Shoyama CY and Yuan CS. Crocin from *Crocus sativus* possesses significant anti-proliferation effects on human colorectal cancer cells. *Exp Oncol* 2007; 29(3):175-180.
14. Nair SC, Pannikar B and Panikkar KR. Antitumour activity of saffron (*Crocus sativus*). *Cancer Lett* 199;57(2):09-114.
15. Ali Esmail Al-Snafi AE. The pharmacology of *Crocus sativus*- A review. *IOSR J Pha* 2016;6(6):08-38.
16. Dhiman K. Ayurvedic Intervention in the Management of Uterine Fibroids – A Case Series, *AYU* 2016;35(3):303-309.
17. Bharti V, Gupta UD, Das SN. *Commiphora mukul* extract and Guggulsterone exhibit Antitumour activity Through Inhibition of Cyclin D1, NF-K β and induction of Apoptosis in Oral Cancer Cell. *Asian J Pharm Clin Res* 2015;8 (4):291-295.
18. Ragavi R, Surendran SA. *Commiphora mukul* – An Overview. *Research J Pharm And Tech* 2018;11(7):3205-08.
19. Pandey S. In vivo, Antitumor Potential of extracts from different parts of *Bauhinia variegata* Linn. against b16f10 melanoma tumor in c57bl/6 mice. *Applied Cancer Research* 2017;37 (33):1-14.
20. Camargo JNA, Bertan AS, de Almeida IV, Vicentini VEP, Dusman E, Tonin LTD. Antitumoral Activity, antioxidants Capacity and Bioactive Compounds of Ginger (*Zingiber officinale*). *Acta Scientiarum Technology* 2020; 42:1-11.
21. Yoo ES, Choo GS, Kim SH, Woo JS, Kim HJ, Park YS, et al. Antitumor and Apoptosis-Inducing Effects of Piperine on Human Melanoma Cells. *Anticancer Research* 2019; 39(4):1883-1892.
22. Wang Y, Li J, Guo J, Wang Q, Zhu S, Gao S, et al. Cytotoxic and Antitumor Effects of Curzerenone from *Curcuma longa*. *Planta Med* 2017; 83 (1-2); 23-29.
23. Ajay Kumar K, Satish S, Sayeed I et al. Therapeutic Uses of Cassia Fistula: Review. *Int J Pha Chem Res* 2017; 3(1): 38-43.
24. Amalraj A, Gopi S. Medicinal properties of Terminalia arjuna (Roxb.) Wight & Arn.: A review. *J Trad Complem Med* 2017;7:65-78
25. Mishra A, Kumar A, Rajbhar N, et al. Phytochemical and Pharmacological Importance of *Saraca indica*. *Int J Pharmac Chem Sci* 2013; 2 (2):1009-13.
26. Ateeq A, Sunil SD, Varun SK, Santosh MK. *Phoenix dactylifera* Linn. (Pind Khajura)-A Review. *Res Ayurveda Pharma* 2013; 4(3): 447-451.
27. Ali HSS. *Unani Advia-e-Mufradah*. 8th ed. Qaumi Council Barai Farogh Zaban-e-Urdu, New Delhi: 1999. P- 27-277.

Conflict of interest: Author declares that there is no conflict of interest.

Guarantor: Corresponding author is guarantor of this article and its contents.

Source of support: None

How to cite this article:

Khan MS, Shaikh I, Khan M. Effects of Herbal formulations in management of Uterine Fibroid (*Sul'ah-E-Rehm*) – A Case Report *Int. J. AYUSH CaRe*. 2021; 5(2):91-97.