# Unani Management of Recurrent Bartholin's Gland Cyst: A Case Report

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#### ABSTRACT

In female reproductive system, Bartholin's glands are one of the essential organs. In 17<sup>th</sup> century, Danish anatomist, Casper Bartholin first described about Bartholin's cyst. at the posterior introitus of vagina two pea-sized glands of Bartholin's glands found and secret mucus to ensure vaginal and vulval lubrication. Bartholin gland abscess or cyst is a common vulval pathology affecting the females of reproductive age group. this study was conducted in the OPD of the National Ayurvedic Teaching Hospital, Colombo-08. A 31-year-old female patient came with recurrent Bartholin cyst for one year with the complaint of left labia majora swelling, pain and difficult to walk. she was given Unani treatment *Roghn e khas* to apply twice a day for 2 weeks intervals for 6 weeks. the main outcome measure was to observe the resolvent of swelling and pain of Bartholin's cyst. the patent's swelling on labia majora and pain reduced within 4 weeks of the

treatment. these Unani formulae might have as stat to resolve the swelling and pain of Bartholin's cyst as they considered to have *muhalli e warm*, *musakkin, daf e tafoon* and *daf e humma* action. some of these drugs have been pharmacologically proved to its medicinal propoerties, which is reported to improve the reducing swelling and pain that may be attributed to foavinoids, saponins and alakaloids.

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## INTRODUCTION

In female reproductive system, Bartholin's glands are one of the essential organs. In 17<sup>th</sup> century, Danish anatomist, Casper Bartholin first described about Bartholin's cyst. at the posterior introitus of vagina two pea-sized glands of Bartholin's glands found and secret mucus to ensure vaginal and vulval lubrication.<sup>1</sup> Bartholin gland abscess or cyst is a common vulval pathology affecting the females of reproductive age group.<sup>2</sup> Bartholin gland cyst occurs due to obstruction of the distal Bartholin gland duct results in retention of mucus secretions<sup>1</sup> and more prone to infection and formation of abscess which may result in vestibular pain and dyspareunia.<sup>3</sup> The pathogenesis of Bartholin gland cyst starts slowly as the progressive swelling of the labia majora which later becomes painful and finally it is accompanied by fever and massive swelling of the genital vulva on the affected side.<sup>1</sup>

If, Bartholin's cysts small and not inflamed, it may become generally asymptomatic and may be discovered while doing routine pelvic examination but when they become significantly enlarged, they can cause discomfort while walking and during sexual intercourse. Infection of the cyst leads to abscess formation which is associated with severe pain, dyspareunia, fever and limitation of physical activity.<sup>4</sup> Usually in the reproductive years between 20 and 30 years of age Bartholin gland cyst affects 2% of women.<sup>5</sup> Complications of Bartholin's gland cysts or abscesses include recurrence, severe pain, dyspareunia, difficulty in walking, psychological trauma due to stigmatization, marital disharmony and equally those from the treatment procedure such as haemorrhage, pyogenic granuloma, aneasthetic problems, post-operative infection.<sup>6</sup>

Usually, therapeutic considerations are not complex.<sup>7</sup> The treatment options of Bartholin's glands are; antibiotics, simple drainage, fistulization, marsupilization or excision of the gland.<sup>8</sup> A review published in 2009 failed to identify the best treatment approach. The preferred treatment

is surgical drainage and marsupilization, as it preserves function and prevents reformation of the cyst or abscess.<sup>9</sup> Recurrence is reported in approximately 20% of patients (ranging from 0% to 38% and is more frequent after simple drainage. Fistulization and marsupilization give a very low rate of recurrence,<sup>10</sup> although the rate is probably underestimated due to a short follow-up time. And also, complications of the surgical incision are bleeding and pudendal vessels can easily be injured.<sup>11</sup>

We report the case of a 31-year-old female with a one-year recurrent Bartholin's gland cyst whereby managed with Unani medicine was successfully done.

### **Case Presentation**

A 31-year-old married female presented to the Unani gynecology clinic at National Ayurvedic Teaching Hospital, Colombo-08 on 18 July 2018 with the history of recurrent painful huge genital swelling in her left labia majora for one year which initially started as a small swelling, then increases in size, and became painful. She gave a history of pus discharge and due to its recurrent and persistent swelling; it was associated with mild fever and inability to walk properly. She had a history being two times treated by surgical incision and drainage though she noted temporary relief. However, the swelling recurred at intervals of than two months within one year. After that, she came for the Unani management to our Unani Gynecology outpatient clinic at National Ayuvedic Teaching Hospital, Colombo-08.

On examination, there was tender large mass involving the left labia majora, large discharge with pus. Her vaginal examination revealed normal sized uterus with health cervix, and felt left labia  $3 \times 5$  cm mass and diagnosed as Bartholin's cyst. Patient was explained regarding the

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#### Table 1: Details of Unani formulation.

Name of the Unani formulation	Ingredients	Reference
Roghan e Khas	Barg e madar (Calotropis gigantea) Barg e dathura (Dathura stramonium L) Barg e erend (Ricinus communis) Saindoor (Red Lead) Lak (Stick Lac/Laccifer lacca) Mom (Bees wax) Roghan e kunjad (Gingelly oil)	Ayurveda Pharmacopoeia- Unani- Volume -1 Unani Pharmacopoeia (Formulary of Unani Medicine)- IMPC

response of Unani treatment in Bartholin's cyst. Patient gave consent to start Unani treatment. After that, patient was advised to take Unani medicine *Roghan e khas*. (Table 1) *Roghan e khas*<sup>12-13</sup> is mentioned in Ayurveda Pharmacopoeia-Unani- Volume -1 and Unani Pharmacopoeia [(Formulary of Unani Medicine)-IMPC] for the management of cyst, abscess and rheumatism *roghan e khas* is a semisolid ointment and could be applied externally. As per Unani scholars the cyst mentioned under the heading of *akyas* or *dubayla* and its management mentioned that using of *zimad* (paste) or *marham* (ointment) which could have *muhallil e warm* (anti-inflammatory), *daf e tafoon* (antiseptic) and *musakkin* (analgesic) and it will provide very good response in acute suppuration like Bartholin's cyst or abscess.

Patient was advised to apply *Roghn e khas* morning and evening daily on Bartholin's cyst. And she was given 2 weeks treatment and ask her to visit OPD again after 2 weeks. Then again she was given same medicine for 2 weeks and another 2 weeks and duration of the total treatment was 6 weeks.

After receiving 1<sup>st</sup>, 2 weeks treatment, patent came with the history of reduced pain and swelling. And further after another 2 weeks treatment her swelling and pain was completely reduced and same treatment was repeated for another 2 weeks. After 3<sup>rd</sup> visit, she came with no history of swelling, pain and no history of difficult to walk. And requested to her come every 2 weeks intervals as follow-up for 4 weeks.

## DISCUSSION

In our case, the patent presented with a history of recurrent left Bartholin's cyst for the past one year. In our case, there was a history of recurrent Bartholin's cyst and this might be due to repeated exposures to the infections and surgical incision and drainage have been shown to increase risk of Bartholin's cyst recurrence.<sup>14</sup>

The drugh *Roghan e khas*, mainly it has *muhallil e waram* (antiinflammatory/resolvent) property and specially used for resolution of firm swelling.<sup>12-13</sup> *Barg e dathura* is one of the ingredients of *Roghn e khas*. In Unani classical books it was mentioned that, *Barg e dathura* have *Muhallil* (Antiinflammatory), *Musakkin* (Analgesic), *Daf e taffun* (Anti-septic), *Dafe e humma* (Atipyretic).<sup>15-17</sup> Pharmacologically it has been proven that, aqueous extract of *dathura* evaluated analgesic effect on hot plate reaction induced Writhing in mice. Oral treatment given 400mg/kg proved significant. Further, ethanolic extracts of leaves of *D. stromonium*. Ethanolic extracts was subjected to preliminary screening for anti-inflammatory activity in albino rats. ethanolic extracts exhibited significant anti-inflammatory activity comparable to the standard drug against carrageenan induced rat paw edema method.<sup>18</sup> Action of *Barg e erend* has *Mohallil* (Anti-inflammatory), *Musakkin* (Analgesic), Antiresolvent, anti-microbial and *Mudammil e qurooh* (wound healing).<sup>15-17</sup> Pharmacologically it has proven that, leaves extract was studied in Wistar albino rats in acute and chronic inflammatory models and due to flavinoids it reduces the inflammation and Ricinus extract have antioxidant activity in forming reducing the wound healing in excision in wound in rat model.

*Barg e madar* have action of *Mohallil* (Anti-inflammatory), *Musakkin* (Sedative), *Mudammil e qurooh* (Wound healer).<sup>17</sup> And it was scientifically proven that, the anti-inflammatory activity of *Calotropis gigantea* was proved against albumin denaturation technique. The Percentage inhibition of denaturation produced by test drug was comparable with that produced by Ibuprofen (85.71%) which indicates that test drug possesses significant anti-inflammatory activity<sup>19</sup> and the alcoholic extract of the leaves of *Calotropis gigantean* was administered externally and explored for its analgesic activity in chemical and thermal models in mice on wound infection. In the hot plate method, the paw licking time was delayed. The analgesic effect was observed after 2 days.<sup>20</sup> *Saindoor* was mentioned in Unani classical books that it has properties of *Mohallil* (Anti-inflammatory), *Musaffi khoon* (Blood purifier), *Daf e hummiyat* (Anti pyretic) and Lak have *Mohallil* (Anti-inflammatory), *Habis*(haemostatic) action.<sup>15-16</sup>

The treatment objectives are to holdup the degenerative process and to minimize symptoms. Unani System of medicine provides a better, less side effects, economical and effective way of treatment by its various means like *ilai bil tadbeer* (regimenal therapy), *ilaj bil ghiza* (dietotherapy), *ilaj bil dawa* (pharmacotherapy) and *ilaj bil yad* (surgery). According to literature review it is found that Unani physicians were used these methods as single as well as combined way.

In this study applying application, is a procedure of regimenal therapy of *muhallil e warm, daf e hummah, musaffe khoon*, and *musakkin* herbomineral formulation was done. *Roghan e khas* (an Unani compound in the form of ointment) two times applied. Redness and itching were reduced within one week and swelling, and discharging pus were reduced at the end of the 4 weeks of treatment plan. Patient was completely recovered at the end of the 6 weeks treatment. The all ingredients which were used for resolving have anti-inflammatory, demulcent, analgesic, divergent, properties by which we can say that the ointment having some chemical constituents of above said properties work locally by doing *imalaimawadd* (diversion of morbid matters) from diseased part to healthy part followed by resolving the inflammatory condition of the cyst.

## CONCLUSION

Present case report reveals that applying roghan *e harr ratab* (hot and moist ointment) which contain *musakkin, muhallil, daf taffun and musaffe khoon action* in drug of *roghan e khas* is quite effective in the management of Bartholin's cyst. Therapy was found to be safe and well tolerated by patient. Hence it is suggested that further evaluation is necessary for the scientific conclusion. More well-designed study with a standardized protocol and adequate number of participants is needed to evaluate the effects of *roghan e khas* as adjuvant therapy in the treatment of Bartholin's cyst.

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