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AMAL-E-KHARAM (SETON THERAPY) IN THE MANAGEMENT OF FISTULA-IN-ANO: A COMPREHENSIVE REVIEW OF TRADITIONAL PRINCIPLES

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ABSTRACT

Fistula-in-ano, known as *Nasoor-e-Maqad* in Unani medicine, is a chronic condition characterized by an abnormal tract connecting the anal canal or rectum with the perianal skin. Its management remains challenging because of recurrence, persistent discharge, and the risk of postoperative faecal incontinence. The Unani system of medicine describes traditional surgical approaches for managing this condition, including *Amal-e-Kharam*, which is discussed in relation to seton therapy. To review the concept, classification, clinical examination, and management of *Nasoor-e-Maqad* in Unani medicine, with particular emphasis on *Amal-e-Kharam* and its relationship to modern seton techniques. A narrative review was undertaken using the supplied literature on fistula-in-ano, including classical Unani references and modern surgical publications. The review covers the Unani concept and classification of fistula, traditional examination methods, principles of seton placement, indications, complications, and the importance of preserving anal sphincter function. Unani literature describes *Nasoor-e-Maqad* as a chronic, difficult-to-heal lesion associated with persistent discharge, pain, and recurrent infection. It broadly distinguishes *Nasoor-e-Nafiz* from *Nasoor-e-Ghair Nafiz*, corresponding to communicating fistulous tracts and blind sinuses, respectively. *Amal-e-Kharam* is described in the reviewed article as a traditional thread-based surgical approach related to seton therapy, intended to facilitate drainage and gradual division of the fistulous tract. Modern evidence highlights the importance of identifying the internal opening, assessing tract complexity, and minimizing sphincter injury. *Amal-e-Kharam* represents a traditional surgical concept relevant to the historical management of *Nasoor-e-Maqad*. Its relationship to modern seton therapy provides a basis for comparative discussion; however, further standardized clinical studies are required to establish its safety, efficacy, recurrence rates, and effects on continence.

KEYWORDS: Nasoor-e-Maqad, Fistula-in-Ano, Unani Medicine, Amal-e-Kharam, Seton Therapy, Nasoor-e-Nafiz, Nasoor-e-Ghair Nafiz, Anal Sphincter.

I. INTRODUCTION OF FISTULA-IN-ANO

Fistula-in-ano, particularly of cryptoglandular origin, remains a challenging condition in surgical practice. Cryptoglandular infection accounts for approximately 90% of anal fistulas. The main challenges in treatment are recurrence and postoperative fecal incontinence, making the selection of an appropriate surgical procedure difficult. Conventional procedures, such as fistulotomy, cutting seton, draining seton, and advancement flap surgery, are widely used. Although fistulotomy and cutting seton have good healing rates, they may increase the risk of sphincter damage and incontinence. Newer, sphincter-preserving techniques, including ligation of the intersphincteric fistula tract (LIFT) and video-assisted anal fistula treatment (VAAFT), aim to reduce sphincter injury but have shown variable success rates.

Fistulectomy with primary sphincter reconstruction is another promising approach, although further long-term evaluation is required. Overall, no single surgical technique has been established as the best treatment for all types of fistula-in-ano. Existing studies often have small sample sizes and lack adequate comparative data. Therefore, large-scale comparative studies and long-term follow-up are needed to determine the most effective and safest treatment options, balancing fistula healing, recurrence prevention, and preservation of continence.[1-10]

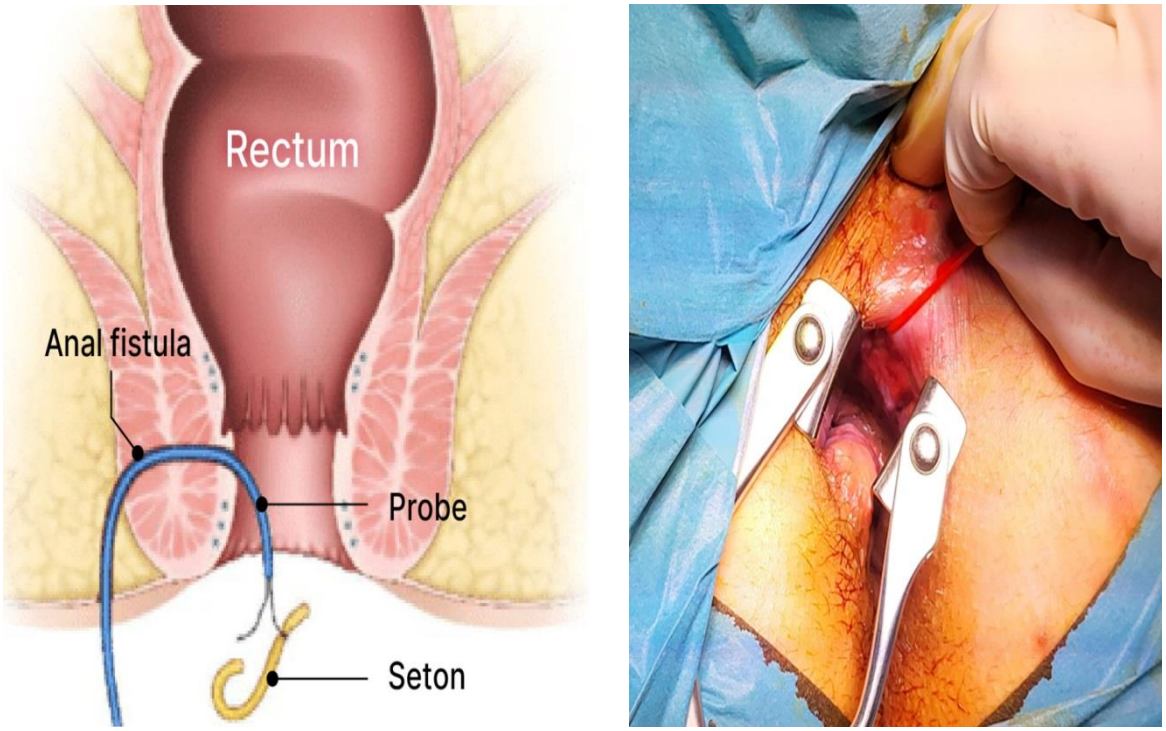


Fig. 01 Anal Fistula- A Common Disease in male and female.

Fistula is a Latin word means an abnormal tube like or pipe like passage.[1] The concept of fistula in ano (Nasoore Maqad) is present since hundreds and thousands of years but the oldest known reference at the beginning of the recorded medical history is around 400 BC (around 2000 years old). This reference is obtained by the book of the famous Greek Physician and the Father of Medicine Hippocrates. Hippocrates was the first person in the world who described Nasoore Maqad in his book "Corpus Hippocraticum'' with highly appreciable details and suggest the Setons therapy for the complicated and high anal fistulas.[2&3] The fistula in ano is defined as a track lined by granulation tissue that connects deeply in the anal canal or the rectum and superficially on the skin around the anus.[4] According to Unani System of Medicine the *Nasoore Maqad* is described as a bad and dirty wound which occurs in relation to the rectum and the anal canal mostly due to perianal sepsis and always exudes serosanguinous or infected materials and usually associated with pain and burnings. These wound are deeply connected that is why it is considered as the *Aseerul-Indemal Qarha* which not heals easily.[5-13]

Steele R.S et al (2011) claimed that approximately 30% to 50% of patients with an anorectal abscess, a persistent tract, or fistula-in-ano, develops, extending from the anal canal to the perineal skin.3,4 Unfortunately, there is no definitive way to predict who will develop one, or how to prevent one. Patients often report persistent purulent drainage or intermittent perianal swelling and tenderness followed by spontaneous discharge.[15]

Table No. 01: Fistula-in-Ano According to Unani Scholars.

No.	Unani Scholar	Books	Description
1	Hakim Ibn Sina (Avicenna)	Al-Qanun fi al-Tibb	Discusses diseases involving abnormal discharges, ulcers and pathological passages within the broader framework of classical medicine. A specific fistula-in-ano description should be verified from the relevant text and edition.
2	Ismail Jurjani	Zakhira Khwarazm Shahi	An important Persian Unani medical reference covering surgical and local diseases; specific statements about anal fistula require verification in the original text.
3	Hakim Azam Khan	Akseer-e-Azam	A major Unani reference on diseases and their treatment; relevant

			discussions of Nasoor should be checked in the original edition.
4	Hakim Muhammad Kabeeruddin	Unani translations and commentaries	His works help explain classical terminology and descriptions of diseases, including surgical conditions; the exact passage should be verified before attribution.
5	Classical Unani concept	Nasoor	An abnormal tract or passage associated with chronic suppuration or discharge. The term is broader than fistula-in-ano and may apply to fistulae at other sites.
6	Unani etiological framework	Asbab (causative factors)	Local inflammation, infection, abscess formation and persistent discharge may be considered in explaining the development of a fistulous tract.
7	Unani clinical framework	Alamat (signs and symptoms)	Pain, swelling, recurrent discharge of pus, and an external opening near the anus may be observed in fistula-in-ano.
8	Unani therapeutic framework	Ilaj (treatment)	Traditional management may include local treatment and surgical approaches, selected according to the site, extent and condition of the tract.

Table No. 02: Specific views of Unani scholars on Fistula-in-Ano (Nasoor-e-Maqad).

No.	Unani scholar	Classical book	Description / contribution regarding fistula-in-ano
1	Abu al-Hasan Ali ibn Sahl Rabban al-Tabari	Firdous-ul-Hikmat	Descriptions of the origin and development of fistula from anorectal disease are discussed in the Unani literature.
2	Abu Bakr Muhammad ibn Zakariya al-Razi	Kitab-ul-Hawi	A major medical compilation containing discussions of diseases and their treatment, including surgical conditions.
3	Ali ibn al-Abbas al-Majusi	Kamil-us-Sana'a	Contributed to the classical medical and surgical understanding of diseases.
4	Abul Qasim al-Zahrawi	Al-Tasrif	Known for contributions to surgery, including operative techniques for fistulous conditions.
5	Ibn Sina (Avicenna)	Al-Qanun fi al-Tibb	Discusses diseases of the anus and surgical management within the broader framework of anorectal disorders.
6	Ismail Jurjani	Zakhira Khwarazm Shahi	Classical discussions of fistula treatment include surgical intervention and measures intended to promote wound healing.
7	Najibuddin Samarqandi	Moalijat-e-Sharah Asbab	Unani literature attributes to this scholar an explanation of fistula developing when a perianal abscess fails to heal properly.
8	Hakim Akbar Arzani	Tibb-e-Akbar	A source for classical Unani medical terminology and descriptions of diseases and their management.
9	Hakim Mohammad Azam Khan	Akseer-e-Azam	Discusses Nawaseer (fistulae), including considerations relevant to the location of fistula-in-ano and surgical management.
10	Hakim Mohammad Ajmal Khan	Haziq	Cited in Unani literature discussing the causes and management of fistula-in-ano.

II. Fistula-in-Ano in the Unani System of Medicine

In the Unani system of medicine, fistula-in-ano is commonly correlated with Nāṣūr, a chronic abnormal passage or tract that connects the anal canal or rectum with the perianal skin. It is generally characterized by persistent or intermittent discharge of pus, pain, swelling, and recurrent infection around the anal region. The condition is discussed in Unani literature under diseases involving abnormal ulceration and the formation of a persistent tract. Its clinical features broadly correspond to modern descriptions of fistula-in-ano.

A. Etiology (Asbāb)

The possible causes of Nāṣūr described from a Unani and contemporary clinical perspective include.

- Infection and suppuration: Formation of an abscess around the anal region, followed by persistent drainage and tract formation.
- Chronic inflammation: Persistent inflammation and failure of the wound to heal completely.
- Improper healing of ulcers: Chronic ulceration may contribute to the development of an abnormal passage.
- Local factors: Repeated infection, tissue damage, and inadequate drainage may contribute to persistence or recurrence.

B. Clinical Features (Alāmāt)

The common clinical manifestations include.

- Persistent or intermittent discharge of pus or blood.
- Pain and tenderness around the anal opening.
- Swelling and redness in the perianal region.
- Recurrent abscess formation.
- Itching, irritation, and discomfort during sitting or defecation.

- An external opening with a palpable tract in some cases.

C. Etiopathogenesis

According to *Hakeem Khajandi* and *Ibn Sina* the most common cause of the *Nasoore Maqad* is perianal abscesses which has burst or ruptured spontaneously or due to its improper drainage[5&9], (This is the most widely accepted theory behind the Origin of the anal fistula, and now a days this theory is known as the crypto glandular theory of the perianal sepsis and fistula).[14-15]

The other causes of the *Nasoore Maqad* are Chronic and longstanding Bleeding, Dysentery or Diarrhoea, Constant and long term use of highly spicy diets, Chronic Rectal inflammations and irritations etc[11] (if we observe keenly then all the above mentioned symptoms are now a day's are diagnosed as Ulcerative Colitis and Crohn's Diseases etc.)

Table No. 03 Classification of Nasoor-e-Maqad according to Unani System of Medicine.

According to the Unani literature, Nasoor-e-Maqad (fistula-in-ano) is broadly classified into two main types: Nasoor-e-Ghair Nafiz and Nasoor-e-Nafiz.[13-16]

No.	Classification	Definition / Description	Modern correlation
1	Nasoor-e-Ghair Nafiz (Non-penetrating fistula)	A blind tract with an external opening but without communication with the anal canal or rectum.	Perianal sinus / blind tract
2	Nasoor-e-Nafiz (Penetrating fistula)	A tract connecting the external opening near the anus with an internal opening in the anal canal or rectum.	True fistula-in-ano

Sub-classification of Nasoor-e-Nafiz

No.	Type	Description	Modern terminology
1	Nasoor-e-Nafiz-e-Dani (Low fistula)	The tract and internal opening lie below the anal sphincter complex or involve its lower portion.	Low anal fistula
2	Nasoor-e-Nafiz-e-Aali (High fistula)	The tract or internal opening lies above or involves a substantial portion of the anal sphincter complex.	High anal fistula

The finding of the internal opening is most important thing during the management of the fistulae as it helps in the tracing of the direction of the track, missing of this point leads to recurrence due to wrong and incorrect management.

Garcia A.G. et al (1996) claimed regarding the factors which are related to the recurrence of fistulae as any technical difficulty in pre-operative evaluation, complex type of fistula, missing the right track during surgery, horseshoe extension, lack of identification or lateral location of the internal fistulous opening, previous fistula surgery, lack of expertise of the surgeon performing the procedure, lack of treatment of aetiological factors and lack of proper follow-up.[17]

Sygut A. Et al (2010) reported regarding the importance of the finding of the internal opening of the fistula as the management of fistulae depends upon its proper evaluation which includes finding the direction of track as well as number and location of internal opening, whether high or low, in relation to the anorectal ring. In a systematic review, the relative risk of anal fistula recurrence was 20-fold higher in patients in whom the internal opening was not identified compared to those with the internal opening identified.[18]

III. Unani Method of Examination of Nawaseer (Sinus and Fistula-in-Ano)

Table No. 04: Differentiation between Nafiz and Ghair Nafiz Nawaseer.[11-16]

No.	Parameter	Nasoor-e-Nafiz (Fistula)	Nasoor-e-Ghair Nafiz (Sinus)
1	Patient position	Lithotomy position	Lithotomy position
2	Preparation	Cleaning and syringing with Arq-e-Gulab, as described in the source	Same procedure
3	Examination method	Gentle probing of the external opening with simultaneous digital examination of the anal canal	Same procedure
4	Probe examination	Probe tip can be felt through the internal opening in the anal canal	Probe tip cannot be felt in the anal canal
5	Tissue between probe and finger	No intervening tissue layer when the probe enters the anal canal	Mucosal or muscular tissue remains between the probe and examining finger
6	Alternative clinical test	Leakage of gas or faecal matter from the external opening during straining may suggest communication with the anal canal or rectum	No such leakage is observed
7	Interpretation	Communicating tract; fistula-in-ano	Blind tract; sinus

Table No. 05. Differentiation between High and Low Anal Fistula according to the described Unani examination.[14-19]

No.	Parameter	High Anal Fistula (Nasoor-e-Aali)	Low Anal Fistula (Nasoor-e-Dani)
1	Examination method	Probe, seton or thread is passed through the tract, where appropriate	Same procedure
2	Patient action	Patient contracts the anal sphincter as if holding faeces or urine	Same procedure
3	Location of internal opening	Above the contracted anal sphincter	Below the contracted anal sphincter
4	Withdrawal of thread	Resistance may be encountered	Little or no resistance may be encountered
5	Interpretation	Suggests a high fistulous tract	Suggests a low fistulous tract

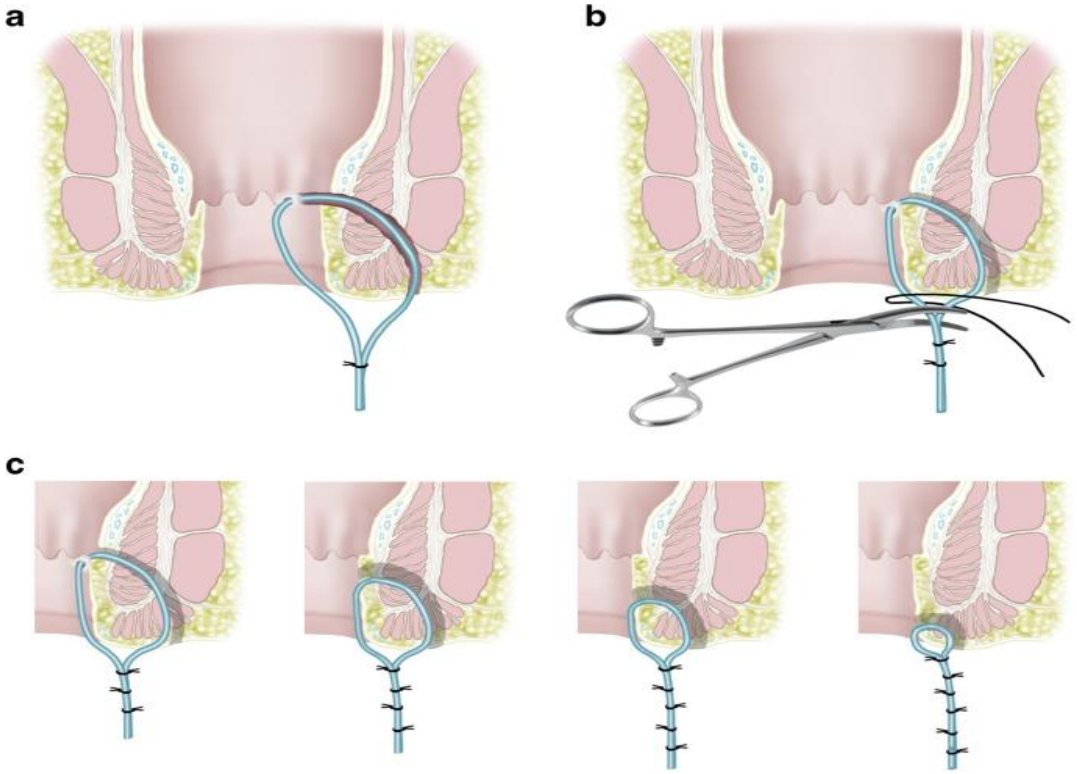


Fig. 02: Cutting of Seton for the Treatment of Anal Fistula.

IV. Managements of Nawaseer According To Unani Medicine

Seton placement is a surgical approach used in the management of *Nasoor-e-Maqad* (fistula-in-ano). A thread or seton is passed through the fistulous tract to facilitate drainage, maintain tract patency, or gradually divide the involved tissue in selected cases. From the perspective of Unani surgery, this procedure may be discussed under *Ilaj bil Yad*, which refers to treatment by manual or surgical intervention.

Two principal approaches are used in modern practice. A **cutting seton** gradually divides the tissue surrounding the fistulous tract and may be considered in selected patients, depending on the involvement of the anal sphincter. A **draining seton** maintains drainage and controls local sepsis, often as an initial or staged procedure before definitive treatment, such as ligation of the intersphincteric fistula tract (LIFT) or advancement-flap repair.

Clinical evidence indicates that cutting setons may achieve relatively low recurrence rates, but the risk of postoperative faecal incontinence varies considerably with the degree of sphincter preservation. A systematic review reported recurrence rates of approximately 5% when the internal anal sphincter was preserved and 3% when it was not preserved. Corresponding faecal incontinence rates were 5.6% and 25.2%, respectively. These findings highlight the importance of preserving sphincter function while achieving fistula healing.

In complex fistulas, particularly horseshoe fistulas, staged draining setons may not provide definitive healing when used alone. Additional procedures may be necessary according to the anatomy and extent of the tract. Thus, the modern seton technique may be

discussed alongside the Unani surgical concept of *Ilaj bil Yad*, while recognizing that the available outcome statistics derive from modern surgical literature rather than clinical evidence specific to Unani treatment.

It is the most ancient and popular technique for the treatment of the fistula advised by Hippocrates at the beginning of the recorded medical history.[21] But it was the Great Arabic Scholar Zakarya Al-Razi who attributed to be first to use the Setons in surgery.[22 & 23] It can be anything like a ligature, silk, nylon or linen etc.[4] Actually this is the earliest form of the medicated threads (Kshar Sutra)[24]; this technique is basically suggested for high anal and inter sphincter fistulas. Use of Setons gives mainly two benefits. It cuts the fistulous track with a passage of time, usually it takes three weeks to one year to cut through the tissues (cutting Setons) and it also facilitates the local drainage which relieves in inflammatory conditions.[25-26]

\Ritchie RD et al (2009) and Vial M. Et al (2010) claimed regarding the management of the high anal fistulae with Setons that the use of seton is a traditionally favoured method for treating high fistulae, and those associated with inflammatory bowel conditions such as Crohn's disease, to minimize the incontinence problem.[27-28]

V. Amale Kharam in the Management of Fistula (Nasoor-e-Maqad) According to Unani Medicine

Amale Kharam (Amal-e-Kharam) appears to refer to a traditional Unani surgical procedure, but the exact meaning and spelling need verification from the original Unani text before defining it definitively in a dissertation. In the management of Nasoor-e-Maqad (fistula-in-ano), traditional surgical procedures may be discussed under Ilaj bil Yad (surgical treatment). The treatment aims to address the fistulous tract, control discharge and promote healing.

Table No. 06 Amale Kharam Description.

No.	Parameter	Description
1	Unani terminology	Amale Kharam — exact terminology requires verification
2	Disease	Nasoor-e-Maqad (fistula-in-ano)
3	Therapeutic category	Ilaj bil Yad (surgical intervention), if confirmed by the source
4	Possible therapeutic objective	Management of the fistulous tract and associated local disease
5	Treatment selection	Depends on the tract's location, extent and involvement of the anal sphincter
6	Modern clinical consideration	Sphincter preservation and prevention of faecal incontinence are essential

Amale Kharam **(**almost similar to the Kshar Sutra procedure**)** is a procedure which is basically the modified and advanced form of the Setons (especially the Cutting Seton) and it is done in case of high anal or multi tracked fistulae, in most of the cases it is combined with other procedures. This procedure is done by a special instrument which was made and designed by Abulqasim Al-Zahrawi himself. This instrument is highly malleable and having an eye at the tip for insertion of the thread. After cleaning and syringing with Arq Gulab, trace the full course of the fistula and then a matted thread made with silk (*Resham*) is pierced in the instrument and passed from the external opening to the internal opening with one hand, and the thread is received by the finger kept in the anal canal, now both the end of the threads are tied and kept for two to three days as it is. Once the thread is fixed in the track after few days, the both the ends of the thread are opened and rubbed vigorously to debride the fistulous track and make a new wound. Now remove the previous thread and insert a new thread and repeat the same procedure until the wound is cut throw with a period of time without hampering the continence.[6-7, 9 & 16]

According to Sungurtekin U. et al (2016) the purpose of the fistula surgery is to eradicate the fistulous tract without hampering the anal continence. Different techniques have been proposed to decrease the risk of postoperative anal incontinence. Seton placement is one of them. Theoretically, Seton is an alternative to one-stage fistulotomy, since it facilitates the division of anal sphincters more slowly and preserves sphincter functions. This technique is basically recommended to preserve the postoperative anal incontinence. Loose seton is defined as a ligature made from any type of material (mostly it is made with heavy silk) and placed in the fistulous track around the anal sphincter and tied without any tension.[30]

VI. Fistula Repair (Seton): Cost, Indications, Preparation, Risks, and Recovery[20-22]

Fistula repair using a seton is a surgical procedure for treating anal fistulas, which are abnormal connections between the anal canal and the surrounding skin. These may develop following abscesses, inflammatory bowel disease, or trauma. A seton, made of surgical thread or other material, is passed through the fistulous tract to maintain drainage or gradually divide tissue, depending on the technique used. It is particularly useful in complex or recurrent fistulas where conventional surgery may carry a greater risk of complications.

A. Indications for Fistula Repair (Seton)[23-25]

Seton placement is recommended in selected patients with symptomatic anal fistulas, particularly when

conservative management is insufficient. Common indications include.

- **Complex Fistulas:** Fistulas involving sphincter muscles or multiple tracts.
- **Recurrent Fistulas:** Persistent or recurrent fistulas following previous treatment.
- **Underlying Conditions:** Fistulas associated with Crohn's disease or other inflammatory bowel diseases.
- **Infection or Abscess:** To maintain drainage and control local infection as part of a treatment plan.
- **Patient Preference:** When a sphincter-preserving or staged treatment approach is appropriate.

B. Contraindications for Fistula Repair (Seton)

Suitability for seton placement depends on the patient's clinical condition. Factors requiring assessment include.

- **Active Infection:** An associated abscess may require prompt drainage rather than delaying treatment.
- **Severe Comorbidities:** Uncontrolled diabetes, significant cardiac disease, or liver and kidney dysfunction may increase surgical risks.
- **Pregnancy:** The timing of surgery should be individualized according to clinical urgency.
- **Coagulation Disorders:** Bleeding disorders or anticoagulant therapy require careful evaluation.
- **Poor General Health:** Immunosuppression or other conditions may affect healing.
- **Postoperative Care:** Inability to follow wound-care instructions may require additional support.
- **Previous Surgeries:** Scarring and altered anatomy can complicate treatment.
- **Psychological Factors:** Anxiety or difficulty understanding postoperative instructions may require counseling and support.

C. Procedure of Fistula Repair (Seton)

Preparation is essential for safe treatment and recovery. The main steps include.

- **Consultation:** Review medical history, symptoms, medications, and treatment concerns.
- **Preoperative Testing:** Blood investigations and MRI or ultrasound may be required to assess the fistula.
- **Medication Review:** Anticoagulants and other medications should be managed according to medical advice.
- **Dietary Instructions:** Follow the surgeon's instructions regarding food and fluids before surgery.
- **Bowel Preparation:** Enemas or other preparation may be advised in selected cases.
- **Hygiene:** Clean the perianal area before the procedure as instructed.
- **Transportation:** Arrange assistance after sedation or anaesthesia; avoid driving for at least 24 hours when advised.
- **Postoperative Planning:** Arrange wound-care supplies, prescribed medicines, and follow-up appointments.

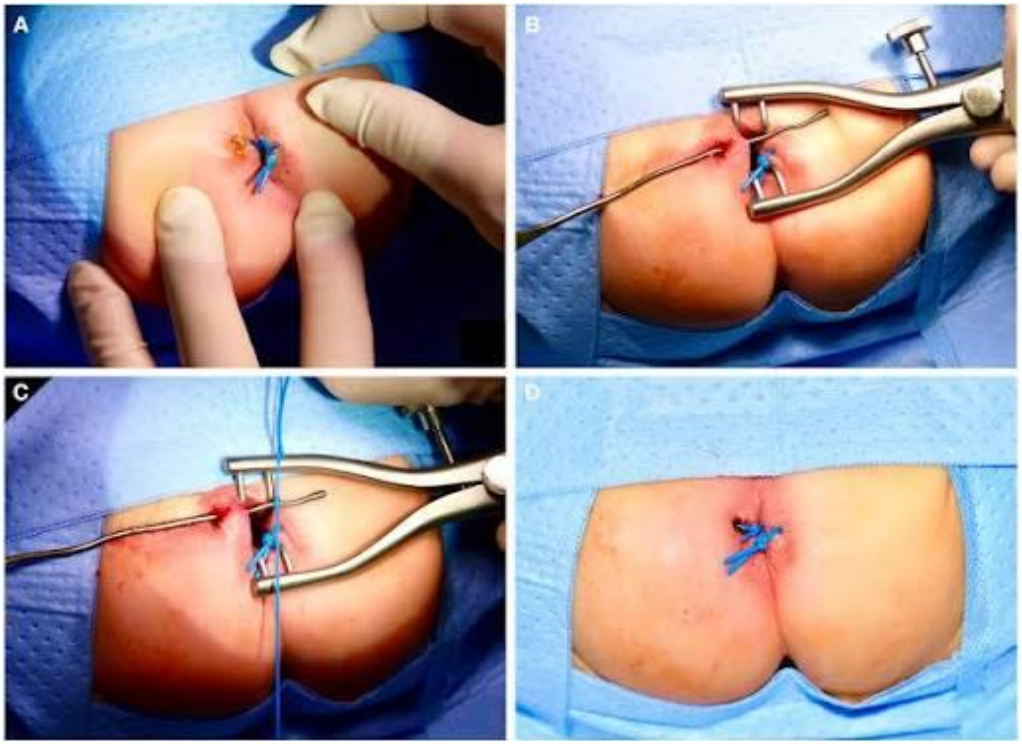


Fig. 03 The surgical technique is illustrated by an exemplary case of an infant of 10 months of age with two FIA. After placement of seton in a FIA at 3 o'clock, FIA with concomitant perianal abscess at 10 o'clock is explored (A). FIA is identified by the insertion of a bulb-headed lacrimal probe (B). The silicone vessel loop is attached (C) and pulled trough. The loop is ligated loosely outside the anus without any additional tension to the skin (D).

D. Risks and Complications of Fistula Repair (Seton).[25-27]

Like other surgical procedures, seton placement carries potential risks.

Common Risks

- **Pain and Discomfort:** Soreness around the operative site.
- **Bleeding:** Minor postoperative bleeding may occur.
- **Infection:** Local infection or persistent discharge may develop.
- **Seton Displacement:** The seton may loosen or become dislodged.

Rare or Significant Risks

- **Fistula Recurrence:** The tract may persist or recur, requiring further treatment.
- **Anal Sphincter Injury:** Cutting setons may cause impaired continence.
- **Anal Stenosis:** Scar formation may narrow the anal canal.
- **Abscess Formation:** A new or persistent abscess may require drainage.
- **Anaesthesia Complications:** Adverse reactions or respiratory complications may occur.

E. Recovery after Fistula Repair (Seton)

Recovery depends on the fistula's complexity and the type of seton used. Initial recovery may take 2–4 weeks, although complete healing can take several weeks or months. During the first week, patients may experience soreness, swelling, or minor bleeding. Prescribed pain relief, appropriate hygiene, and avoidance of strenuous activities are recommended. Light activities may be resumed gradually as tolerated, with follow-up visits to monitor healing. Recovery and return to work vary according to individual circumstances.

F. Benefits of Fistula Repair (Seton)[28-30]

Seton placement helps maintain drainage, control local infection, and manage symptoms such as pain, swelling, and discharge. In selected complex fistulas, it can preserve sphincter function by avoiding immediate division of substantial sphincter tissue. It may also serve as a staged treatment before definitive surgery. However, healing is not guaranteed, and recurrence or continence problems remain possible.

Table No. 07 Fistula Repair (Seton) vs. Alternative Procedure[28-30]

While the Seton technique is a common method for fistula repair, some patients may consider alternative procedures, such as fistulotomy. Below is a comparison of the two methods.

Feature	Fistula Repair (Seton)	Fistulotomy
Procedure Type	Minimally invasive	Surgical incision
Recovery Time	2-4 weeks	4-6 weeks
Pain Level	Moderate	Higher
Risk of Incontinence	Lower	Higher
Ideal for Complex Fistulas	Yes	No
Follow-Up Care	Regular monitoring	May require more care

VII. DISCUSSION

Fistula-in-ano is a challenging anorectal condition because of its tendency to recur and the potential for postoperative faecal incontinence. In the Unani system of medicine, it is known as *Nasoor-e-Maqad* and is described as a chronic, difficult-to-heal lesion associated with persistent or intermittent discharge, pain, swelling, and recurrent infection. The reviewed literature identifies perianal abscess and improper drainage or healing as important factors in the development of fistula-in-ano. The Unani classification broadly divides *Nasoor-e-Maqad* into *Nasoor-e-Nafiz* and *Nasoor-e-Ghair Nafiz*. The former communicates with the anal canal or rectum, whereas the latter represents a blind tract without such communication. Further differentiation into high and low fistulas is important because the position of the tract in relation to the anal sphincter influences treatment selection and the risk of impaired continence. The identification of the internal opening and the complete course of the fistulous tract are essential components of assessment. The reviewed article describes traditional examination methods involving a probe or thread, along with digital examination. In contemporary practice, clinical examination, examination under anaesthesia, and appropriate imaging may be required, particularly in complex or recurrent fistulas. Traditional probing should be performed cautiously by trained surgeons because forceful manipulation may create a false passage or damage the sphincter.

Amal-e-Kharam is discussed in the reviewed Unani literature as a thread-based procedure related to seton therapy. The described technique involves passing a thread through the fistulous tract and periodically manipulating or replacing it to facilitate tract treatment and gradual division. This approach is discussed under *Ilaj bil Yad*, or surgical treatment. However, the precise historical terminology and technical details should be verified against the original Unani references before making definitive claims about the procedure's historical origin or equivalence to modern seton techniques.

Modern seton therapy includes two principal approaches. A cutting seton gradually divides tissue across the fistulous tract, whereas a draining seton maintains drainage and helps control local sepsis. Draining setons may be used as an initial or staged intervention before definitive procedures such as ligation of the

intersphincteric fistula tract (LIFT) or advancement-flap repair. The choice depends on fistula anatomy, sphincter involvement, associated disease, and the patient's clinical condition.

The literature reviewed in the article emphasizes the balance between successful fistula healing and preservation of anal continence. Although cutting setons may achieve relatively low recurrence rates, sphincter division can increase the risk of postoperative incontinence. Draining setons may be useful in complex fistulas, but they do not invariably provide definitive healing when used alone. Horseshoe and recurrent fistulas often require individualized, staged management.

Overall, the traditional Unani approach and modern seton therapy share an interest in managing the fistulous tract and facilitating healing. Nevertheless, historical descriptions and conceptual similarities do not establish clinical equivalence. Prospective studies using standardized techniques, appropriate comparison groups, adequate follow-up, and validated continence assessments are needed to determine the safety and effectiveness of *Amal-e-Kharam* in contemporary clinical practice.

VIII. CONCLUSION

Nasoor-e-Maqad (fistula-in-ano) is a chronic anorectal condition recognized in Unani medicine and modern surgery. The Unani literature describes its classification, clinical examination, and surgical management, including *Amal-e-Kharam*, a traditional thread-based technique discussed in relation to seton therapy.

Seton placement has an important role in selected complex and recurrent fistulas by facilitating drainage or enabling gradual division of the fistulous tract. However, the risk of recurrence and postoperative faecal incontinence remains an important consideration, particularly when the anal sphincter is divided. Treatment should therefore be individualized according to the anatomy and complexity of the fistula, with preservation of continence as a major objective.

The historical principles of *Amal-e-Kharam* provide an opportunity for further investigation of traditional Unani surgical practices. However, its clinical efficacy and safety should not be assumed from its similarity to modern seton procedures. Well-designed clinical studies are required to establish standardized methods, healing outcomes, recurrence rates, complications, and effects on anal sphincter function. Such research may help clarify the place of this traditional procedure within evidence-based management of *Nasoor-e-Maqad*.

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