

## ARTICLE ORIGINAL/ORIGINAL ARTICLE PRURITUS ANI: MORE THAN A DECADE OF PERSONAL EXPERIENCE IN LEBANON

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**ABSTRACT • Introduction :** Pruritus ani is a common medical condition that is difficult to treat in the absence of obvious predisposing factors. Hereby, we report more than a ten-year experience in the management of pruritus ani stressing the importance of early detection, identification of the etiology, and management. **Methodology :** A total of 124 patients were managed in the surgical clinic. The follow-up was between 11 to 17 months. All patients had the symptoms for a period of time ranging between 6 and 40 months. Patients were treated according to their respective etiology. Medical cases like contact dermatitis and psoriasis were treated by applying proper topical ointments, while other cases like anal fissure and fistula were treated surgically. Idiopathic patients were treated by tattooing (injection to perianal skin with methylene blue). **Results & Discussion :** The majority of patients with known medical etiology responded favorably to conservative treatment ( $\approx 92\%$ ). In addition, surgical management for anorectal disorders like hemorrhoids and fistula showed a consistent improvement (94%). However, patients who had their symptoms neglected for longtime or had used over the counter medication without a proper medical follow-up, experienced a lower success rate of cure (76%). **Conclusion :** Patients who were diagnosed and treated at first hand, showed better results than those who sought late medical advice and management (i.e. > 18 months). In light of the above, a multidisciplinary team approach consisting of a proctologist, a gastroenterologist and a dermatologist is recommended.

Keywords : Pruritus ani, management, idiopathic

### INTRODUCTION

Pruritus ani is an annoying and distressing common anorectal pathology. It is defined as an intense chronic itching or burning sensation in the perianal skin [1].

It affects 1-5% of the population, with an occurrence mostly between the fourth and sixth decades of life, four times more common in men [2].

In general, three quarters of pruritus cases have a co-existing pathology. The majority of such coexisting pathologies are predominantly hemorrhoids and fissures, hence the involvement of coloproctologists [3].

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**RÉSUMÉ • Introduction:** Le prurit anal est une condition médicale commune, difficile à traiter en l'absence de facteurs prédisposants évidents. Nous rapportons une expérience personnelle de 12 ans de prise en charge du prurit anal en soulignant l'importance du dépistage précoce, de l'identification de l'étiologie et de la prise en charge. **Méthodologie:** Au total, 124 patients ont été traités en clinique externe avec un suivi compris entre 11 et 17 mois. Tous les patients étaient symptomatiques, entre 6 et 40 mois, et ont été traités en fonction de l'étiologie respective. Les cas médicaux, tels dermatite de contact et psoriasis, par l'application de pommades topiques appropriées, tandis que les cas comme la fissure anale et les fistules ont été traités chirurgicalement. Les cas idiopathiques ont été traités par tatouage (injection percutanée avec du bleu de méthylène). **Résultats & Discussion :** La majorité des patients ayant une étiologie médicale connue ont répondu favorablement à un traitement conservateur ( $\approx 92\%$ ). En outre, le traitement chirurgical des troubles ano-rectaux comme les hémorroïdes et les fistules a montré une amélioration constante (94%). Cependant, les patients qui avaient longtemps négligé leurs symptômes ou avaient utilisé des médicaments sous le comptoir, sans un suivi médical approprié, avaient un taux de guérison inférieur (76%). **Conclusion:** Les patients qui ont été diagnostiqués et traités précocement avaient de meilleurs résultats que ceux qui ont eu recours à une consultation médicale et prise en charge tardives (> 18 mois). À la lumière de ce qui précède, une approche d'équipe multidisciplinaire comprenant un proctologue, un gastroentérologue et un dermatologue est recommandée.

The etiological factors vary from perineal fecal contamination, perianal infection, allergic contact dermatitis, special dietary product, dermatological conditions, neoplastic diseases, steroidal treatment, psychological factors, and some specific systemic diseases like diabetes mellitus and liver disease [4].

A detailed history and a full examination are necessary. Sometimes, laboratory investigations for microorganisms should be sought and biopsies of the affected skin could be indicated [2].

As far as management of pruritus ani is concerned, three main components can go hand in hand: elimination of irritants and stretching, general control measures like cleansing, and active treatment including medications, topical and systemic or even surgical intervention [2, 5].

This article reports more than a decade of experience in the management of pruritus ani by a coloproctologist.

## MATERIALS AND METHODS

**Sample description**

One hundred and twenty-four patients presented with symptoms of pruritus ani were seen in my office from March 1998 till April 2012. There were eighty-eight males and thirty-six females. The age range was 27 to 75 years with an average of fifty-two years. The follow-up time range was between 11 to 17 months. Most of the patients had their symptoms for a long time, more than six months. The major cause of the symptoms was due to an anal complaint in 66.9% (n = 83) of the patients (Table I). The major cause of the symptoms was hemorrhoids and mucosal prolapse which accounted for 24% (n = 30), fissures 18.5% (n = 23), fistulae 14.5% (n = 18), and perianal abscess and previous operation for 4.8% (n = 6). In addition, there were 6.5% (n = 8) of patients with fungal infection, psoriasis, drugs and diet, and 9.5% (n = 12) with contact dermatitis and fecal contamination. The rest 17% (n = 12) were of unknown origin, idiopathic.

**Methodology**

All our patients were subjected to thorough history taking including fluid intake, frequency and consistency of bowel movements, and details of any previous or current dermatology or gastrointestinal problems [4]. Then, a complete physical examination was performed focusing on finding the common anorectal cause of pruritus. The patients were examined in left lateral position, which is comfortable for both the patient and the physician. Both buttocks were separated gently and inspection was performed under good light to detect any change in the perianal skin such as redness, irritation, bumps, thickening or softening of the skin, and any breaks in the skin from scratching and anal fissure. Digital exam of the anal region was performed to exclude any mass inside the anal region, the introduction of a proctoscope was mandatory to look for possible specific causes of the symptoms such as internal anal hemorrhoids, anal fistula, anal mass and possibly other findings. Anal fissure was excluded by direct inspection of the anus before performing any digital rectal examination or introducing a scope.

**TABLE I**  
OVERALL MAJOR CAUSES OF PRURITUS ANI  
(N = 124)

	%	# patients
Hemorrhoids & mucosal prolapse	24	30
Anal fissure	18.5	23
Anal fistulae	14.5	18
Previous operation	4.8	6
Perianal abscess	4.8	6
Fecal contamination & contact dermatitis	9.5	12
Fungal infection, diet, drug & psoriasis	6.5	8
Idiopathic or primary pruritus ani	17	21

Moreover, special laboratory investigations were included: blood glucose level, blood nitrogen level, sedimentation rate hemochrome, liver function, and analysis of stools. In cases where the perianal skin showed obscure dermatosis, particularly a chronic one, a biopsy was essential, and a dermatologist was consulted to assist with the diagnosis and management of the case. In the absence of any documented cause, the condition was termed idiopathic or primary pruritus ani (21 patients) which is more challenging for treatment, while those related to known detectable disease are called secondary for which the treatment of the causal disease will cure the condition (hemorrhoids, anal fissure, etc. [6]) as depicted in Table I.

## RESULTS

The proper management of this socially annoying form of pruritus ani consists in searching for and eliminating the several factors that contribute to its occurrence. Hence, first and foremost, the underlying cause of pruritus ani should be sought and corrected [7].

When anal fissures, hemorrhoids, fistulae, anal cysts or sinuses were the cause of pruritus ani, a surgical intervention was performed with 94% success (Table II).

In cases where no skin disease was readily apparent, an underlying systemic disorder or drug-related cause should be sought. All medications were stopped or substituted. Irritancy of clothing such as woolens should be avoided. Attention also has been drawn to the role of diet which can cause pruritus ani. Items that have been implicated include coffee, tea, milk products, alcohol, tomatoes, carbonated beverages, cheese, chocolate and nuts [4]. Cigarette smoking was another factor to be considered [8].

Changing the dietary factor played an important role in relieving the symptoms in 95% in our series within two weeks. Also, in a large proportion of patients, the situation was relieved by a simple attention to anal hygiene. Patients were advised to use plain water, particularly when bathing, showering, and following defecation. They were also advised to dry the area with a hair dryer. One important option was to avoid use of toilet paper, instead, cotton wool or a proprietary cloth called "tucks" must be used for wiping.

However, when the proprietary preparation failed, we considered using a topical 1% steroid ointment for two weeks which resulted in regression of the condition in 92% of cases. However, as soon as symptoms disappear, the steroid is discontinued in order to avoid problems of skin atrophy [9-10].

All dermatophytic infections were treated in collaboration with the dermatologist using the appropriate ointment, a high rate of symptoms relief was achieved (95%). Topical Imidazole or terbinafine, topical antibiotics (fusidic acid), and oral antibiotics may be necessary, especially if the itch has a long history (1 year), or there were skin changes present [2].

**TABLE II**  
CATEGORIES AND TREATMENT MODALITIES

	Patients N	Cure rate %
<b>Surgical Management</b>		
Hemorrhoids, anal fissure, fistula & abscesses	83	94
<b>Medical treatment with hygiene &amp; diet</b>		
Fungal infection, dermatitis & psoriasis	20	95
<b>Tattooing</b>		
Idiopathic pruritus	21	77.7

However, for primary pruritus ani, success rate did not exceed 77.7% (Table II).

## DISCUSSION

Pruritus ani is a medical condition that has multiple etiologies. The majority of coexisting conditions are anorectal, predominately hemorrhoids and anal fissures [4, 11-12]. Attention must be focused on the cause in order to treat the symptoms [13]. So, most patients with pruritus ani of known origin responded well to treatment as reported in our series. There was a complete relief of symptoms (94%) in cases of hemorrhoids, anal fissures, and anal fistula. Up to 70% of patients with pruritus ani had anorectal disease with hemorrhoids being the commonest condition (24%). This would be due most probably to sphincter dysfunction and anal fecal seepage [14]. Therefore, all anorectal conditions should be sought and treated, as even small skin tags may hide fecal residues or trap moisture perpetuating the condition.

Cleansing should become the common practice in our region, a part of lifestyle habits and culture. In fact, some authors attributed these symptoms to lack of "bidets" [4, 15], as the case in England. However, many papers from France and Italy revealed that the incidence was as high as in England [16]. This is probably due to the fact that vigorous scrubbing of the area with soap and water will cause the skin to be defatted and a contact dermatitis may supervene [17]. Goligher wrote a good and relevant comment on anal hygiene: "Rarely, I have identified a patient with pruritus ani who was not scrupulous with respect to anal hygiene" [18].

It was postulated that some dietary products such as coffee and spices induce mucous discharge, probably through a systemic route, or possibly, in some instances, by an increase in the pH of the stool as detected by Mark's [19]. Another possibility is that this kind of food could lead to reduction in anal sphincter pressure, exaggerated anal reflexes and undigested foods sensitizing the perianal skin [20].

Many patients who underwent surgery and medical treatment had their pruritus ani persisted, especially in those referred from other physicians: For such cases, we considered anal tattooing with methylene blue (injected

intra-dermally and subcutaneously) as described by Eusebio *et al.* [21-23]. The mechanism of methylene blue may be related directly to its toxicity to the nerves supplying the perianal skin thus suppressing the desire to scratch and disrupting the vicious itch-scratch-itch cycle [24-25]. Half of the treated patients were free of symptoms within two weeks and another six patients after one year (overall 76%). However, three of our patients developed skin necrosis. This may be due to the fact that the injection of methylene blue was done too superficially leading to skin ulceration and skin necrosis. In addition, two patients didn't improve. We also detected that five of our patients who had their symptoms relieved required another injection treatment after 15 months. Moreover, we noticed that most of our patients subjected to methylene blue injection (14 patients) had decreased perianal skin sensation [26]. However, methylene blue was well tolerated by them, resulted in no severe complications, and they recovered within one year.

Shafik reported in 2004 a response rate of 88.5% of his series with pruritus ani treated by injection with phenol [27]. Furthermore, Lysy *et al.* in 2003 suggested using topical capsaicin ointment for pruritus ani with high success (70%) [28]. This product may act through production of inhibitory feedback which may eliminate the need to scratch. Earlier Copeland had suggested the use of methyl prednisolone injection intra-lesional [29]. He had good success and this is most likely due to its anti-inflammatory effects. However, we must be cautious since many reports showed relapsing cases of pruritus ani after such a treatment and further follow-up and investigations are needed. Suys's suggested that the use of topical tacrolimus 0.1% is effective in idiopathic pruritus ani after 15 days of treatment [30].

Some reports advocated that one fourth of patients having pruritus ani were due to extra mammary Paget and perianal Bowen disease [31]. In our series, we did not have any case related to neoplasia.

Finally, we must not forget that special attention to patients with anxiety, neurosis or psychosis, and reassurance is just as effective in the management of the disease as any other medical treatment [1, 32-34].

## CONCLUSION

There is very little information on the overall prognosis of these patients. It appears clearly, in our series, that the group of patients with a specific known etiology do better than the idiopathic variety of the disease, especially those who did seek medical advice as soon as they had their symptoms. Consequently, patients who had the disease for a short period respond better than those who had it for a long time before presentation to the physician.

Therefore, the approach to the management of pruritus ani is multidisciplinary; it is a team approach where the proctologist, the gastroenterologist, and the dermatologist work in a concerted effort. Hence, the management of the condition should focus on reducing the

source of irritation, changing of life style, and improving perianal hygiene [35].

Despite the fact that patients go shopping from one physician to another, this series could show the data emanating from 124 patients.

In conclusion, these patients could still be managed with great success using the three basic approaches, with the elimination of irritants and scratching, with general control, and active treatment measures, keeping in mind that the success of treatment begins with establishing a good doctor-patient relationship.

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