



## Dermatological manifestations of inflammatory Chronic bowel disease (IBD): About 20 cases

Raphaël SIDIBE\* (1), Imane ELHIDAOU (1), Arnaud EYI (1), Zouhour SAMLANI (1),  
Khadija KRATI (1), Sofia OUBAHA (2), Said AMAL (3)

(1) Service de Gastro-entérologie, CHU Mohammed VI- Marrakech.

(2) Laboratoire de physiologie, faculté de médecine et de pharmacie- Marrakech  
CHU Mohammed VI, Avenue Ibn Sina Ammerchich, Marrakech (Maroc)

(3) Service de Dermatologie, CHU Mohammed VI- Marrakech.

---

### ABSTRACT

**Introduction:** The extra-digestive manifestations of chronic inflammatory bowel disease (IBD) are frequent, they precede, accompany or are independent of this Gastrointestinal tract disease. Their management is multidisciplinary, thus involving a Multidisciplinary approach of IBD with extra-digestive manifestations, but also informing Patients in order to draw their attention to any unusual clinical signs of this Digestive impairment, but also to ensure the proper compliance treatments Proposed to treat these extra digestive manifestations. **Patients and methods:** This is a prospective study of 20 cases of IBD with dermatological manifestations assembled within the Gastroenterology and Dermatology Services of CHU Mohamed VI Over a period of 6 months (from August 2014 to January 2015). **Results:** 20 patients with dermatological manifestations coming within the scope of study into the IBD, this includes 15 patients suffering from Crohn's disease (CD) and 5 cases of Hemorrhagic Rectocolitis (HRC), mean age was 26 years with a sex ratio M/W of 0,66. We found 10 cases of Pyoderma Gangrenosum, 3 cases of erythema nodosum, 4 cases of sweet syndrome, 2 cases of dermatitis Herpetiform, and only one patient had psoriasis. These manifestations were observed with regards IBD out break in 15 patients, they were accompanied by IBD in Remission in 4 cases and were observed in a latent IBD case leading to its Diagnosis in this case alone. All were treated with combination therapy for IBD and Specific dermatological treatment. Evolution was good in all cases. **Conclusion:** In General, the occurrence of invalidating dermatoses does not change the prognosis Of gastrointestinal track impairment of IBD. The role of the dermatologist in directing patients towards gastroenterology during consultation when the disease's first manifestation is on the skin is important.

**Keywords :** Dermatological manifestations ; inflammatory Chronic bowel disease

---

### INTRODUCTION

Dermatological manifestations (cutaneous and / or mucosal) appearing during IBD may be varied and include:

- Dermatological damage directly or indirectly associated with IBD such as specific (granulomatous), reactive dermatoses; And cutaneous manifestations of carnal origin,
- Dermatological damage associated with the use of immunomodulatory treatments such as anti-TNF $\alpha$  [1].

These dermatoses constitute a frequent reason for consultation for dermatologists and reinforce the transversal care of patients with IBD. There are also dermatoses, most of them autoimmune, which can not be classified in any of the three previous categories [2].

Many disorders of the gastrointestinal tract include skin manifestations which may be revealing, which places the dermatologist in the first line to orient towards the consultation of gastroenterology. Conversely, the gastroenterologist is often confronted with cutaneous-mucosal lesions for which there is the question of a possible relationship with a digestive disease already known. [3] These dermatological manifestations are not necessarily dependent on the evolution of MICI and may even appear before the development of digestive symptoms so that the diagnosis of IBD can be made more early. The prevalence of cutaneous manifestations during IBD is relatively similar for CD and UC (9% -19% for MC, 9% -23% for UC) [1,4].

The objective of this work is to describe the cutaneous manifestations in patients with IBD followed in the department of dermatology and gastroenterology of the CHU Mohamed VI.

#### MATERIALS AND METHOD

This is a prospective study of 20 cases of IBD with dermatological manifestations collected in the departments of gastroenterology and dermatology of CHU Mohamed VI over a period of 6 months (from August 2014 to January 2015).

#### RESULT AND DISCUSSION

The diagnosis of IBD for the 20 patients was retained on a set of epidemiological, clinical, endoscopic, morphological and evolutionary arguments. The average age was 26 years with a clear male predominance and unsex H / F ratio = 0.66. There were 15 cases of Crohn's disease and 5 cases of Ulcerative-haemorrhagic Rectocolitis. Dermatological manifestations were concomitant with the outbreak of IBD in 15 cases, 75% of which 3 were considered to be severe, whereas in 4 patients, remission was observed. In 1 case, the IBD was latent. Thus, The dermal involvement was revealing in only one case. On clinical examination, Pyoderma gangrenosum was the main dermatological manifestation observed in half of our patients (50%) [Fig. N ° 1], 3 cases of erythema (Fig. 2), 4 cases of sweet syndrome, 20% [Fig. 3], 2 patients had dermatitis herpetiformis, ie 10% [Fig. Patient had psoriasis at 5% [Fig. 5]. In total, it was Crohn's disease in 55% of cases and RCH in 45% of cases (Tab. N ° 1). Pathologic biopsy was performed to support the diagnosis in 17 patients, ie 85% of the cases, and found a dense PND infiltrate with a central area of suppurative inflammatory necrosis associated with a perivascular lymphocytic infiltrate ( Evoking a Pyoderma gangrenosum) found in 50% of cases; A superficial dermal edema with diffuse infiltrate of PNN sometimes extending to the level of the hypodermis with perivascular influx more polymorphic without sign of vasculitis (evoking sweet syndrome) found in 20% of cases; A discontinuous dermal infiltrate with PNN accumulation and micro-abscess formation in the dermal papilla, associated with a granular deposition of immunoglobulin A (IgA) on the top of these dermal papillae (Dermatitis herpetiformis) found in 10% of cases; Finally, the biopsy in a case of erythema nodosus had found an atypical cicatricial evolution.

From a therapeutic point of view, all our patients have been placed under:

- Treatment of IBD with attack treatment followed by maintenance therapy for thrust forms:
- Severe thrusts (3 cases): intravenous corticosteroid therapy at a dose of 1mg / kg / day followed by oral relapse with adjuvant corticosteroid therapy, bi-antibiotics using imidazoles and quinolones, And thrombo-prophylaxis. Maintenance treatment was provided by Salazopirine.
- Moderate outbreaks (10 cases): Oral corticosteroids were initiated as a 1 mg / kg / day dose of treatment with adjuvant corticosteroid treatment and maintenance therapy with Salazopirin.
- Minimal thrusts (2 cases): therapeutic management was provided by Salazopirine at a dose of 4-6 g / d

On the digestive side, the progression under first-line treatment was good except for three patients. Thus, two cases of cortico- resistance were observed, one case of MC and one case of RCH, hence the introduction of Azathioprine and Infliximab respectively; And another case of RCH that did not respond to the treatment of 2nd intention and in which it was realized a total colectomy

- Specific dermatological treatment of the associated cutaneous manifestation was proposed for:
- Pyoderma gangrenosum: (Prednisolone at a dose of 1 - 1.5 mg / kg / day combined with daily local care)
- Erythema nodosum (Rest, limb elevation, restraint associated with an analgesic treatment and a non-steroidal anti-inflammatory drug indomethacin at a dose of 75-150 mg / d)
- Sweet syndrome (treated with Indometcin which was associated with Prednisolon in severe and extensive forms)
- Dermatitis herpetiformis (treated with Dapsone)
- Psoriasis treated with Dermocorticoids

The progress of the dermatological attack was good in all cases.

## Discussion

Inflammatory Bowel Diseases, which include Hemorrhagic Recto-Colitis (HRC), Crohn's Disease (CD) and certain indeterminate colitis; Are chronic inflammatory diseases of the digestive tract evolving by flare-ups with a peak onset in young adults. The extra-digestive manifestations are frequent and polymorphic [5]. More than 25% of IBD develop extra-intestinal signs; The prevalence of extra-intestinal mucocutaneous manifestations in IBD is close to 50%, the most frequent of which are mouth ulcers, erythema nodosum and Pyoderma gangrenosum; Lesions which do not usually present diagnostic difficulties [6]. Some studies provide a detailed classification of the characteristics of the various cutaneous-mucosal manifestations and the main diagnosis to be made according to the elementary lesions observed (Table 2.3). [6] In reality, the frequency of these dermatological manifestations is difficult To be evaluated and varies according to the series from 2 to 85%. However, in a prospective study in 100 patients with IBD, systematic dermatological examination revealed mica-related mucocutaneous lesions in 65% of patients with CD and in 40% of patients with CHD [7]. For MC, the results are also very varied: between 4% and 85% (general titles), 5% to 15% (Barreiro et al., Eur J GastroenterolHepatol 2007) and 91% . For UC, erythema nodosum is the most common cutaneous manifestation described in 6 to 15% of cases, the prevalence of oral aphthosis is about 20% and Pyoderma gangrenosum is observed in 2 to 5 % Of IBD with colic involvement and three times higher in UC than in Crohn 's disease [9]. Overall,

these dermatological manifestations of IBD, with the exception of erythema nodosum and aphthae, are not correlated with the severity or extent of lesions [10]. Dermatological manifestations during IBD can be categorized into 3 categories, which takes into account the circumstances of their occurrence even if it is more oriented towards CD:

- many manifestations are called "reactive" although they do not always evolve in parallel with digestive surges;
- MC-specific granulomatous lesions are defined by the histological image of gingival granuloma; They are very rarely correlated with the activity of the digestive disease;
- certain manifestations, exceptional in the course of RCH, are related to the various deficiencies related to the malabsorption syndrome;
- Finally, there are dermatoses, often with autoimmune determinism, which can not be classified in the three preceding categories; The value of their association with digestive disease varies greatly from one disease to another [11].

Some of these lesions may occur during the IBD surgery, others may develop on their own account, thus requiring specific therapeutic management [12]. 5-aminosalicylates (5-ASA), corticosteroids, thiopurines and anti-TNF $\alpha$  are the backbone of IBD treatment; In the era of biotherapies, new therapeutic objectives include the induction and maintenance of mucosal healing [13]. More patients with CD than HC were included in our study. This is in line with the epidemiology of IBD in Morocco [14] and in France [15, 16]. In the 20 patients with mucocutaneous manifestations, it is interesting to find only 4 who were in clinical remission, while 75% of them came for an outbreak of the disease of which 3 were considered severe, indicating that " A significant proportion of patients with IBD do not have a controlled disease in the age of biotherapies. In the literature, dermatological manifestations most frequently found are erythema nodosum, whereas in our series, Pyoderma gangrenosum is the most frequent manifestation found in 50% of cases; This could be explained by the small size of our workforce. However, the literature reports that Pyoderma gangrenosum is predominantly found in patients with thrombosis [10, 15, 16]. It is important to note that 75% of our patients were in the thrust of which 3 were considered severe. Treatment of the various mucocutaneous lesions observed during IBD is very difficult to codify because most publications relate to small series, it requires collaboration between dermatologist and gastroenterologist and in practice the treatment goes from local care to Corticosteroids by the general route, via non-steroidal anti-inflammatory drugs, colchicine among others [6,17], while bearing in mind that quality of life may be implicated because of these mucocutaneous and even life-threatening manifestations In children.

## CONCLUSION

Lesdermatoses during IBD are polymorphic in their presentation as well as their pathophysiology. The occurrence of invalidating dermatoses does not generally modify the prognosis of the digestive impairment. The important role of the dermatologist in the orientation towards a consultation of gastroenterology in The specificity and therapeutic impact of certain dermatological lesions during IBD prompts us to suggest systematic screening in all the patients monitored for IBD.

**Link of interest:** none



**Fig. 1:** Pyoderma gangrenosum associated with Crohn's disease



**Fig. 2:** Erythema nodosa in a young woman followed for RCH



**Fig. 3:** Sweet syndrome revealing Crohn's disease



**Fig. 4:** Herpetiform dermatitis in a patient followed for Crohn



**Fig 5:** Psoriasis in a patient treated for ulcerative colitis

**Table 1:** Manifestations dermatologiques associées aux MICI

Dermatological Events	Crohn	RCH
Pyoderma gangrenosum (PG)	6	4
Erythema nodosum (EN)	1	2
Sweet Syndrome	3	1
Herpiform dermatitis	2	0
Psoriasis	0	1

**Table 2:** Characteristics of the main cutaneous-mucous lesions Observed during IBD

**Tableau 2**  
*Caractéristiques des principales lésions cutanéomuqueuses observées au cours des MICI.*

Lésions	Fréquence dans les MICI	Aspect des lésions	Siège habituel des lésions	Évolution parallèle aux poussées de MICI	Intérêt de la biopsie	Principaux diagnostics différentiels
Aphtes	10-20 % (RCH et MIC)	Aphtes d'aspect banal Aphtes miliaires, géants	Bouche, Muqueuse génitale (rare)	+++	±	Lésions orales de MIC Dermatoses neutrophiliques EBA Maladie de Behçet Herpès
Erythème noueux	0,5-15% (RCH et MIC)	Nodules ou papules sous-cutanés douloureux	Jambes	+++	+	Métastase cutanée de MIC Vasculite granulomateuse
Pyoderma gangrenosum	2-4 % (RCH > MIC)	Pustules Ulcères indolores avec bourrelet inflammatoire	Jambes, tesses, visage	++	+	Infection Ulcère vasculaire Vasculites
Syndrôme de Sweet	Rare (RCH > MIC)	Maculopapules rouges infiltrées, bien limitées Fièvre et arthralgies	Membres inférieurs, visage, cou	++	+++	Vasculites Métastase cutanée de MIC
Métastases cutanées	Rares (MIC)	Ulcerations, nodules, papules ou plaques	Ubiquitaire	-	+++	Vasculites Dermatoses neutrophiliques Sarcoidose
Lésions oro-faciales de la MIC	Rares (MIC)	Nodules Fissures, aspect pavé Chéilites	Bouche, vestibule, pharynx, larynx	-	++	Carence vitaminiques ou en oligo-éléments Dermatoses neutrophiliques Aphthose EBA
épidermolyse bulleuse acquise (EBA)	Exceptionnel (MIC > RCH)	Bulles Grains de milium Cicatrices atrophiques	Zones de traumatisme Dos des mains et pieds, coules, genoux, œil, bouche, nez, oesophage	-	+++ (IF, IME)	Autres maladies bulleuses Toxicodermie

EBA : épidermolyse acquise ; MIC : maladie de Crohn ; IF : immunofluorescence ; IME : immunomicroscopie électronique.

**Table 3:** Main dermatological diagnoses to be evoked during the IBD according to the lesion or symptom observed

<b>Tableau 3</b> <i>Principaux diagnostics dermatologiques à évoquer au cours des MCI en fonction de la lésion ou du symptôme observé</i>
<b>Ulcération cutanée</b> Pyoderma gangrenosum Métastase cutanée Vasculites
<b>Pustule</b> Syndrome de Sweet Pyoderma gangrenosum Pyodermite végétante Syndrome Sapho
<b>Maculopapule</b> Syndrome de Sweet Toxidermie Métastase cutanée
<b>Nodule ou nouure sous-cutané</b> Érythème noueux Vasculite granulomateuse Métastase cutanée
<b>Bulle</b> Épidermolyse bulleuse acquise Toxidermie Syndrome de Sweet
<b>Lésion des plis</b> Carences en zinc Candidose sous corticoïdes Pyodermite végétante Métastase cutanée
<b>Prurit</b> Toxidermie Carences

Hepato-Gastroenterology & Digestive Oncology / Volume 6, Number 2, March-April 1999: 113-22

#### REFERENCES

- [1] Julien SENESCHAL. Manifestations dermatologiques au cours des maladies inflammatoires chroniques de l'intestin/ Association française de formation médicale continue en Gastro-entérologie/ POST'U 2016 : 289-291
- [2] Pr Emmanuel Delaporte, Service de Gastro-Entérologie, CHU de Lille (2001/11) Manifestations cutanéomuqueuses des maladies inflammatoires chroniques de l'intestin. *Lettre de l'afa* n°18 - Novembre 2001
- [3] Delaporte E., Piette F. Peau et affections du tube digestif. EMC (Elsevier Masson SAS, Paris),



Dermatologie, 98-876-A-10, **2007**.

[4] Thrash B et al. Cutaneous manifestations of gastrointestinal disease: part II. Journal of the American Academy of Dermatology. **2013**;68(2):211 e1-33; quiz 44-6.

[5] F. Frikha et al. Manifestations extra-digestives des maladies inflammatoires chroniques de l'intestin (MICI). Société Française de Rhumatologie / commission congrès **2009** : Ma 132

[6] Joëlle Bonnet et al. Manifestations cutané-muqueuses extra-intestinales des Maladies inflammatoires chroniques de l'intestin. Hépatogastro & Oncologie digestive/ Volume 6, numéro 2, Mars-Avril **1999** : 113-22

[7] Tavarela Veloso F. Review article: skin complications associated with inflammatory bowel disease. Aliment. Pharmacol. Ther. **2004**;20 Suppl 4:50-53.

[8] F. ait Belkacem. Quelle attitude adopter dans les manifestations cutanées cliniques de dermatologie. Réunion de consensus sur la maladie de Crohn : CHU Mustapha – Alger Alger 25 /26 septembre **2013**

[9] Dr Didier Mennecier. Gros plan sur la rectocolite hémorragique. Rédaction le 10/11/2011 / Corrections et mises à jour : 6/10/**2012**, 12/05/2013

[10] G Gay, F Granel, D Regent. Manifestations extra-intestinales des maladies inflammatoires chroniques de l'intestin (MICI). Acta endoscopica, Volume 29- N°3-**1999** : 263-281

[11] Peau et affections du tube digestif (cours de dermatologie) Copyright **2017** © Medix.free.fr – Encyclopédie médicale Medix

[12] Nadi Anass et al. Peau et maladies inflammatoires chroniques de l'intestin. Livre des résumés Journées Francophones d'Hépatogastroentérologie & d'Oncologie Digestive **2016** : 991

[13] Charlène Duchesne, Patrick Faure, François Kohler et al. Prise en charge des patients atteints de maladie inflammatoire chronique intestinale en France : une enquête nationale auprès des gastroentérologues libéraux. Hegel Vol. 4 N° 1 – **2014** : 12-21

[14] Elazzaoui Zakia. Les Aspects Epidémiologiques des MICI dans une population Marocaine (A propos de 300 cas) Expérience d'un Service d'Hépatogastro-Entérologie du CHU Ibn-Sina de Rabat "Clinique Médicale B" Thèse N° 134 /12.

[15] Gower-Rousseau C, Vasseur F, Fumery M, et al. Epidemiology of inflammatory bowel diseases: new insights from a French population-based registry (EPIMAD). Dig. Liver Dis. Off. J. Ital. Soc. Gastroenterol. Ital. Assoc. Study Liver **2013**;45:89-94.

[16] Chouraki V, Savoye G, Dauchet L, et al. The changing pattern of Crohn's disease incidence in northern France: a continuing increase in the 10- to 19-year-old age bracket (1988-2007). Aliment. Pharmacol. Ther. **2011**;33:1133-1142.

[17] M. RYBOJAD. Signes cutané-muqueux des maladies inflammatoires chroniques intestinales (MICI) de l'enfant. Revues générales Médecine interne. réalités pédiatriques # 195\_Octobre **2015** : 26-30