

Case Report

CHRONIC URTICARIA IN A MIDDLE-AGED WOMAN

S. De Breucker, T. Pepersack, E. Cogan

Department of General Internal Medicine, Erasme Hospital, Université Libre de Bruxelles, Belgium

Correspondence and offprint requests to: Sandra De Breucker, E-mail: Sandra.De.Breucker@erasme.ulb.ac.be

ABSTRACT

We report the case of a 56-year-old female who suffers from chronic urticaria and digestive symptoms, suggesting parasitic infection. Neither repetitive ova and parasite examinations in stools, nor duodenal aspiration examination reveals any parasite. The patient is treated by tinidazole, but the symptoms reappear ten days later. An additive ELISA test on stool remains positive for *Giardia Lamblia*; the patient receives once more tinidazole and symptoms totally disappear. This case report illustrates that the association between urticaria and digestive symptoms should guide the clinician to the diagnosis of *Giardia Lamblia* infection, and it shows the importance of a rapid and highly sensitive diagnostic test for giardiasis, like the ELISA test.

Key words: urticaria, *Giardia*, ELISA

INTRODUCTION

Diarrhoea and urticaria are two common symptoms. When they present together, the patient's history is essential to guide the clinician to the right diagnosis. We present the case of a woman who suffered from Giardiasis presenting with chronic diarrhoea and persistent urticaria.

CASE REPORT

A previously healthy 56-year-old female suffers from chronic urticaria and diarrhoea for 8 weeks.

She experiences hypohydrosis and food intolerance characterized by sourness, bloatings and maldigestion. Four months before, the patient visited historic sites and markets in Morocco and had diarrhoea that resolved spontaneously.

The physical exam shows dermographism associated to diffuse urticarial papular lesions predominating on trunk and limbs.

Except for CRP and ESR (respectively 6.9 mg/dl and 117 mm/first hour), blood tests were unremarkable: eosinophil count was 94/ μ L, Ig E was 7UI/ml; thyroid function was normal and neither antithyroid antibodies nor antinuclear antibodies were detected. Serum tryptase and C1 esterase inhibitor activity were normal.

Ova and parasite examinations are negative in two stool specimens and in a duodenal fluid aspiration. A skin biopsy shows a perivascular inflammatory infiltrate compatible with urticaria.

Despite the lack of evident parasitic infestation, tinidazole 2g was given once. Urticaria disappears and stools become normal.

Ten days later urticarial lesions reappear followed one week later by diarrhoea.

A new stool sample analysis does not show any parasite, but a stool antigen enzyme-linked immunosorbent assays for *Giardia lamblia* returns positive.

The patient is then given once again tinidazole 2g once. Urticaria and diarrhoea totally and definitely disappeared after 2 days.

DISCUSSION

Chronic urticaria is defined by the presence of hives continuously or intermittently for at least 6 weeks; it affects females predominantly; a non specific perivas-

cular lymphocytic infiltrate is commonly found in both acute and chronic urticaria (1).

In the majority of the cases the causal triggering factor remains undetermined. Parasitic infections like *Entamoeba Histolytica*, *Blastocystis Hominis*, *Toxocara Canis*, *Fasciola Hepatica*, and *Strongyloides* have been described as a cause of chronic urticaria. However, *Giardia Lamblia* has been exceptionally reported (2-3).

Giardiasis is a common parasitic infection of the digestive tract which is most often asymptomatic; however, it can cause epidemic childhood diarrhoea or chronic diarrhoea with malabsorption. Extra-intestinal symptoms are unusual. Urticaria is considered as a rare allergic manifestation of *Giardia* infection (2).

Stool ova and parasite examination is the gold standard for identification of *Giardia Lamblia* because of its broad screening. However, this technique depends highly on the skill of an experienced microscopist. Stool antigen ELISA has 100% sensitivity, 100% specificity. It is a quicker and cheaper method (3). Analysis of duodenal fluid and duodenal biopsies may be useful to avoid delayed diagnosis when diarrhoea is absent, but they are much less sensitive than stool direct examination and all immunologic tests (4).

This case report illustrates that the association between urticaria and digestive symptoms should guide the clinician to the diagnosis of *Giardia Lamblia* infection, known as the most frequently found intestinal parasite in western countries.

It also illustrates the importance of a rapid and highly sensitive diagnostic test for giardiasis, because of the poor sensitivity of stool ova and parasite examination and upper endoscopy for the diagnosis of *Giardia Lamblia* in non endemic areas.

Finally, although a single tinidazole administration is curative in most of cases, partial resistance may occur and retreatment is sometimes necessary (5).

RÉSUMÉ

Nous rapportons le cas d'une femme de 56 ans qui présente un urticaire chronique et des symptômes gastro-intestinaux, suggérant la présence d'une parasitose. Malgré plusieurs examens directs sur selles fraîches et sur aspiration duodénale, aucun parasite n'est mis en évidence. La patiente est traitée par tinidazole, mais les symptômes récidivent dix jours plus tard. Un test ELISA est alors réalisé sur les selles et revient positif ; la patiente reçoit 2g de tinidazole supplémentaires et les symptômes s'amendent totalement. Ce cas rapporté montre que l'association d'un urticaire avec des symptômes digestifs devrait orienter le clinicien vers un diagnostic de parasitose, en l'occurrence le *Giardia Lamblia*. Il montre également l'importance d'un test rapide et sensible pour la détection du *Giardia*, tel le test ELISA.

REFERENCES

1. Kaplan AP. Clinical practice. Chronic urticaria and angioedema. *The New England journal of medicine*. 2002 Jan 17; 346 (3):175-9.
2. Harris RH, Mitchell JH. Chronic urticaria due to *Giardia lamblia*. *Archives of dermatology and syphilology*. 1949 May; 59(5): 587-9.
3. Aziz H, Beck CE, Lux MF, Hudson MJ. A comparison study of different methods used in the detection of *Giardia lamblia*. *Clin Lab Sci*. 2001 Summer; 14(3): 150-4.
4. Wahnschaffe U, Ignatius R, Loddenkemper C, et al. Diagnostic value of endoscopy for the diagnosis of giardiasis and other intestinal diseases in patients with persistent diarrhea from tropical or subtropical areas. *Scandinavian journal of gastroenterology*. 2007 Mar; 42(3): 391-6.
5. Wright JM, Dunn LA, Upcroft P, Upcroft JA. Efficacy of anti-giardial drugs. *Expert Opin Drug Saf*. 2003 Nov; 2(6): 529-41.