### Peer reviewed article

# Anal lesions and suspected sexual abuse in a 17-year-old girl

Christoph Gubler, Stephan M. Wildi, Franc H. Hetzer, Nicolas Demartines, Michael Fried

Abteilung für Gastroenterologie und Hepatologie, Departement für Innere Medizin, Universitätsspital Zürich, Switzerland

A 17-year-old school girl presented to the emergency room accompanied by her mother. Over the previous 2 weeks she had experienced anal paraesthesia and most recently suffered strong anal pain which made sitting almost impossible. She had no history of perianal pain, nor any abdominal pain. Stool frequency and consistency had been normal. She had neither lost weight nor experienced fever.

The clinical examination showed a teenage girl in good health. Inspection of the perineum showed beside skin tags several deep anal fissures. The perianal soft tissues including the anal fold pattern were normal. An increased sphincter tonus together with severe pain made the digital rectal examination impossible. Rectoscopy under general anaes-



Figure 1
Perianal examination with fissures.

thesia showed three long (>4 cm) anal fissures together with multiple mucosal lesions (figure).

Since there was no indication in the history of inflammatory bowel disease or any disorder with perinal involvement, anal trauma was suspected. A meeting with the girl's parents and a paediatrician from the child protection service did not provide clear evidence of sexual abuse. However, for the first time in her life the patient and her younger sister had been alone at home with their father for 2 weeks while their mother was on vacation. Thus further legal proceedings were debated. We performed a colonoscopy a few days later which showed severe isolated ulcerative ileitis terminalis. Histology confirmed the suspicion of active Crohn's disease. The patient recovered within 8 weeks and remained in remission at 1-year follow-up following initial treatment with metronidazole per os and immunosuppressive therapy with azathioprine.

Anal mucosa lesions and ulcerations without other abdominal symptoms can be caused not only by sexual abuse, infectious diseases or Lichen sclerosus et atrophicans, but also by Crohn's disease. Anal findings in Crohn's disease may be present in up to one third of patients [1]. Isolated perianal Crohn's disease occurs in approximately 10 percent [2]. Perianal involvement comprises a heterogeneous and complex group of lesions consisting of skin tags, fissures, fistulas and abscesses. These findings are often mistaken for sexually transmitted diseases or sexual abuse. Perianal involvement can even precede any clinical symptomatic primary manifestation of intestinal disease [3], as was the case in our patient.

Conversely, the majority (>84%) of sexually assaulted children and teenagers exhibit no physical signs of abuse [4]. Most commonly detected are hymenal lesions, followed by clinical findings relating to infections such as herpes blisters and abnormal vaginal discharge which lead to the suspicion of sexual abuse (unlike anal fissures which are not specific for abuse) [5].

Crohn's disease presenting as suspected sexual abuse is often misdiagnosed, although there are to our knowledge only five cases [6–8] reported in the literature. However, in contrast to all these cases our patient did not report any abdominal symptoms while showing severe inflammation of the terminal ileum.

Pathological findings on perianal examination, in particular anal lesions may heighten suspicion of sexual abuse. An assumption of sexual abuse, even if subsequently disproved, leads to emotional trauma in the patient and his or her family. Therefore Crohn's disease should always be included in the initial differential diagnosis of perianal disease and the threshold to perform endoscopy should be low.

#### References

- 1 Lapidus A, Bernell O, Hellers G, Lofberg R. Clinical course of colorectal Crohn's disease: a 35-year follow-up study of 507 patients. Gastroenterology 1998;114:1151–60.
- 2 Williams NS, Macfie J, Celestin LR. Anorectal Crohns disease. Br J Surg 1979;66:743–8.
- 3 Palder SB, Shandling B, Bilick R. Perianal complications of pediatric Crohn's disease. J Pediatr Surg 1991;26:513–5.
- 4 Adams JA, Harper K, Knudson S, Revilla J. Examination findings in legally confirmed child sexual abuse: it's normal to be normal. Pediatrics 1994;94: 310–7.
- 5 Kellogg N, Parra J, Menard S. Children with anogenital symptoms and signs referred for sexual abuse evaluations. Arch Pediatr Adolesc Med 1998; 152:634–41.
- 6 Hey F, Buchan PC, Littlewood, Hall R. Differential diagnosis in child sexual abuse. Lancet 1987;1: 283.
- 7 Stratakis C, Graham W, DiPalma J, Leibowitz I. Misdiagnosis of perianal manifestations of Crohn's disease. Clinical Pediatrics 1994;33:631–3.
- 8 Sellman, Hupertz V, Reece R. Crohn's disease presenting as suspected abuse. Pediatrics 1996;97: 272-4.

Correspondence:
Prof. M. Fried
Abteilung für Gastroenterologie
und Hepatologie
Departement für Innere Medizin
Universitätsspital Zürich
Rämistrasse 100
CH-8091 Zürich
Switzerland
E-Mail: michael.fried@usz.ch



## The many reasons why you should choose SMW to publish your research

What Swiss Medical Weekly has to offer:

- SMW's impact factor has been steadily rising, to the current 1.537
- Open access to the publication via the Internet, therefore wide audience and impact
- Rapid listing in Medline
- LinkOut-button from PubMed with link to the full text website http://www.smw.ch (direct link from each SMW record in PubMed)
- No-nonsense submission you submit a single copy of your manuscript by e-mail attachment
- Peer review based on a broad spectrum of international academic referees
- Assistance of our professional statistician for every article with statistical analyses
- Fast peer review, by e-mail exchange with the referees
- Prompt decisions based on weekly conferences of the Editorial Board
- Prompt notification on the status of your manuscript by e-mail
- Professional English copy editing
- No page charges and attractive colour offprints at no extra cost

### Editorial Board

Prof. Jean-Michel Dayer, Geneva

Prof. Peter Gehr, Berne

Prof. André P. Perruchoud, Basel

Prof. Andreas Schaffner, Zurich

(Editor in chief)

Prof. Werner Straub, Berne

Prof. Ludwig von Segesser, Lausanne

### International Advisory Committee

Prof. K. E. Juhani Airaksinen, Turku, Finland Prof. Anthony Bayes de Luna, Barcelona, Spain

Prof. Hubert E. Blum, Freiburg, Germany

Prof. Walter E. Haefeli, Heidelberg, Germany

Prof. Nino Kuenzli, Los Angeles, USA

Prof. René Lutter, Amsterdam,

The Netherlands

Prof. Claude Martin, Marseille, France

Prof. Josef Patsch, Innsbruck, Austria

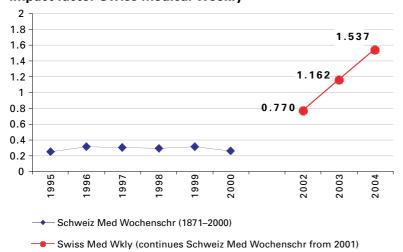
Prof. Luigi Tavazzi, Pavia, Italy

We evaluate manuscripts of broad clinical interest from all specialities, including experimental medicine and clinical investigation.

We look forward to receiving your paper!

Guidelines for authors: http://www.smw.ch/set\_authors.html

### Impact factor Swiss Medical Weekly





All manuscripts should be sent in electronic form, to:

EMH Swiss Medical Publishers Ltd. SMW Editorial Secretariat Farnsburgerstrasse 8 CH-4132 Muttenz

Manuscripts: Letters to the editor: Editorial Board: Internet: submission@smw.ch letters@smw.ch red@smw.ch http://www.smw.ch