

## Post intestinal bypass arthritis-dermatitis syndrome

Sirs,

Jejunioleal anastomosis was a popular procedure to treat morbid obesity between the years 1965-1975. It is a successful method for reducing body weight, but the high rate of complications after surgery (1), make it controversial nowadays. We describe a new case of arthritis-dermatitis syndrome after a biliopancreatic bypass. The last publication of this complication was in 1991 (2).

A 38-year-old woman presented in May 2004 with an intermittent monoarthritis of wrists and papulo-vesicular lesions on her arms and legs. In September 2004 she was admitted to our hospital due to polyarthritis involving the wrists, shoulders, knees and ankles, coinciding with abdominal complaints and diarrhoea. She had fever and maculopapular and pustulovesicular lesions over the trunk, arms and legs. On admission, she presented normocytic anaemia, ESR was 50 mm/h, C-reactive protein was 76.4 mg/L (0.2-7.4), she had hypoalbuminemia, hypocholesterolemia, hypocalcemia, decreased levels of iron, vitamin B12 and 1,25 dihydroxy vitamin D. Electrophoresis of serum proteins showed polyclonal hypergammaglobulinemia. Serologies for HIV, HBV, HCV, Varicella-Zoster, Herpes virus, Brucellae, Yersinia, Lyme and lues were negative. Stool culture for Salmonella, Shigella, Yersinia and Campylobacter was negative. Rheumatoid factor, antinuclear antibodies, antineutrophil cytoplasmic antibodies, antibodies to cyclic citrullinated peptides and HLA-B27 were not present. Complement levels were normal. Radiography of the thorax, hands and sacroiliac joints were normal. Echocardiography was normal. Cutaneous histopathology showed a leukocytoclastic angitis. A biliopancreatic bypass for morbid obesity was made three years ago. A diagnosis of arthritis-dermatitis syndrome post biliopancreatic bypass was made. She was treated with anti-inflammatory agents, with incomplete response. Antibiotic therapy with metronidazole and ciprofloxacin was added. The rash and the arthritis improved after four weeks. Reposition of nutritional status was also necessary.

Biliopancreatic bypass is used to treat morbid obesity. It consists of gastric reduction, anastomosis of the stomach to the ileum and anastomosis of the biliopancreatic segment to the terminal ileum (3).

Stein *et al.* found in 6.5% of patients treated with jejunioleal anastomosis a rheumatic syndrome consisting of recurrent episodes of polyarthralgias and non-deforming polyarthritis, preceded or accompanied in two-

**Fig. 1.** One of the lesions with the typical papulo vesicular morphology.



thirds of cases by cutaneous vasculitis, which was characteristically vesiculopustular dermatitis (4). It may appear from 1 to 108 months postoperatively (4). Our patient presented this syndrome three years after surgery. Joints most commonly involved were the knees, ankles, fingers, wrists and shoulders (4, 5) as was in our patient. Different cutaneous lesions were observed in over 80% of cases (1, 4). The most common lesion was a vesiculopustular dermatitis (6). Our patient had the typical described rash, with red macules that progress to vesicles or vesiculopustules within 24-72 hours (6) (Fig. 1). Histopathology reported is also varied (1).

Etiology is unknown, but bacterial overgrowth in the blind loop has been implicated, providing a source of antigen for immune complexes and cryoprecipitates, or a endotoxin source (7, 8). This hypothesis has been supported by the detection of circulating immune complexes (7, 8). Intestinal bacteria may play a causative role as in other bowel associated arthritides (4).

The treatment includes anti-inflammatory drugs, oral steroids, antibiotics, and finally revision of the bypass procedure, with resection of non-functional segment of the blind loop or reconstitution of the bowel (1, 4, 9). Different antibiotic regimens have been used: tetracyclines, metronidazole, trimethoprim/sulfamethosazole or clindamycin, with variable effectiveness (1). Sulfasalazine was successful in other report (2). Antibiotic therapy resolved the symptomatology in our case, supporting the theory of bacterial overgrowth.

In summary, jejunioleal anastomosis is successful in reducing body weight, but because of the high rate of complications after this surgery (1, 10), its use should be restricted.

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