

Intra-abdominal gossypiboma (textiloma) in two dogs and a cat.

A. Berrocal. Laboratorio de Patología Diagnóstica (Histopatovet), Heredia, Costa Rica.

Introduction

Gossypiboma is a term used to describe a granulomatous inflammatory response against surgical swabs or sponges left in the body after surgery. This pathology is well known in human medicine, however, in veterinary medicine it is considered uncommon. It has been reported mainly in dogs and a few cases in cats, mostly associated with previous ovariohysterectomy.

Objectives

To present the clinical and pathological findings in two dogs and one cat that developed intra-abdominal masses several months after an abdominal surgery. The female dog and cat had previously been ovariohysterectomized whereas the male dog had an intra-abdominal testis removed.

Methods

A computer database search was done in a span period of fourteen years with keywords of textiloma or gossypiboma. The clinical and pathological findings of these three cases are described.

Case 1: A 6-year-old spayed female mixed dog is presented due to skin problems. During the physical examination an intra-abdominal mass was palpated. A laparotomy was performed which revealed a mass attached to the small intestine and the urinary bladder. Grossly there was a 6.0 cm encapsulated mass. At cut surface it was filled with fibrin and yellow material. and acellular yellowed deposition were also present.

Microscopically, there was necrosis mixed with longitudinal and transversal acellular, positive polarized material. Histiocytic cells and acellular yellow deposition was also present. See Fig 1.A, B,C,D.

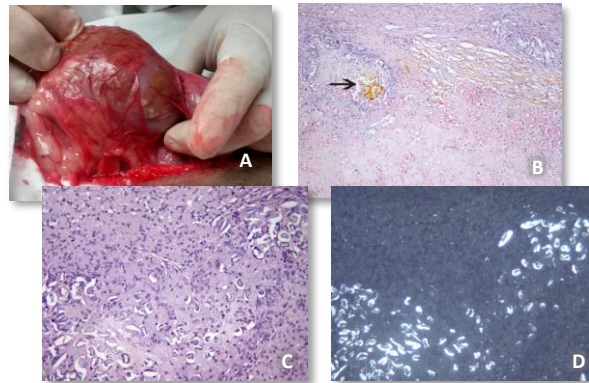


Fig 1-A. An Exploratory laparotomy. A mass cover by hyperemic omentum. **Fig.1-B.** Microscopic changes. A central area (see the arrow) with rest of foreign material and yellow pigment surrounded by fibrous tissue and histiocytes. **Fig.1-C.** Acellular material associated with foamy histiocytes. **Fig.1-D.** A positive polarized light.

Case 2: A 9-year-old spayed female mixed cat was examined because of a urinary tract infection. During clinical evaluation an indolent intra-abdominal nodule was palpated. Radiological examination showed a mineralized mass near the spleen. Grossly, the mass was an encapsulated nodule of 4.0 cm in diameter. Cut sections revealed a cavity filled with caseous material. See Fig 2.A, B, C. Microscopically, the findings were very similar the case 1.

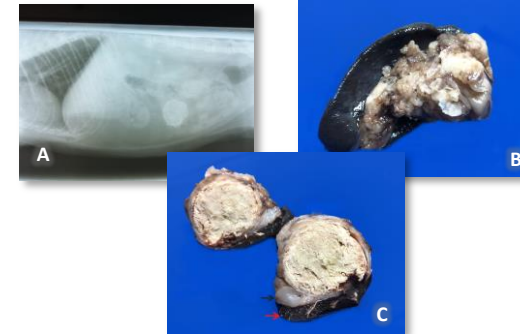


Fig 2-A. A lateral radiography showing a white round mass. **Fig.2-B.** A spleen with a white mass in the visceral area. **Fig.2-C.** At cross section showing a soft mass surrounding by a fibrous capsule. The blue arrow is fat tissue, the black spleen.

Case 3: A 2-year-old neutered male Irish setter dog was taken to the veterinarian due to a lump in the abdomen. During an explorative laparotomy a nodular mass in connection to the omentum and ileum was visualized and surgically removed. Macroscopically, it was a 5.0 cm nodule totally surrendered by omentum adipose tissue. After trimming the mass lumen was fully occupied by filaments of gauze sponge and serosanguineous fluid. See Fig 3.A, B.

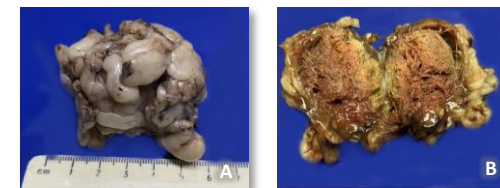


Fig 3-A. A nodule cover by omentum fat tissue. **Fig 3-B.** Cut section showing a massive presence of like filaments originated from surgical gauze.

Microscopically, there was necrosis mixed with longitudinal and transversal acellular, positive polarized material. Histiocytic and multinucleate cells, some of which contained phagocytized foreign material. See Fig.4.A, B, C.

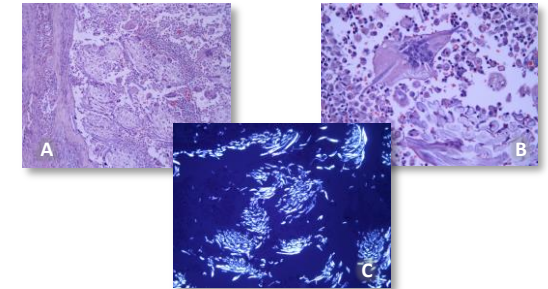


Fig 4-A. Histological inflammatory reaction. There are several longitudinal and transversal section of foreign material mixed with neutrophils, histiocytes and multinucleate cells. **Fig 4-B.** A large multinucleated giant cell with longitudinal filament (phagocytosis). **Fig 4-C.** Enormous quantitative of polarized material.

Conclusions

Intra-abdominal masses are infrequently reported in dogs and cats, with two main etiologies identified; a neoplastic process or inflammatory as occurred in these three cases.

Reference:

- Becker, W.M, et.al. What is your diagnosis? JAVMA, Vol 239, No 10, Nov.15,2011.
- Deschamps, Jacks-Ives, et.al. Extravesical Textiloma (Gossypiboma) Mimicking a Bladder Tumor in a Dog. J. Am. Anim. Hosp. Assoc. 2009; 45:89-92.