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A Case of Coccygeal Bursitis Mimicking Subcutaneous Acute Inflammatory Lesion

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Description

Bursa is an encapsulated structure with little lubrication fluid content, as a cushion between bony prominence and tendon, muscle or skin. Bursitis like a painful cystic mass with fluid accumulation in the synovial bursa may occur near joints. Herein, we present a 31 year old man complaining of a painful mass on lower midline buttock for several days. He has the past history of falling down on his buttock that is on his coccyx bone, one and a half years ago. Since then, a small painless mass developed on coccygeal region (Figure 1).

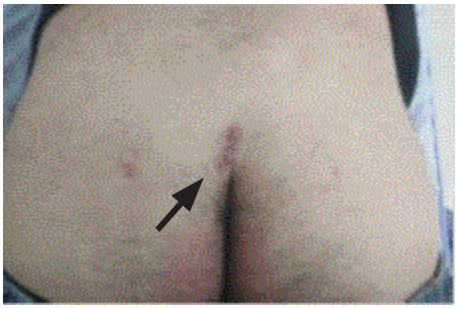

Figure 1: The healing buttock wound of surgical excision (arrow).

In recent days, the mass grows larger and painful. On physical examination, a 3 × 2 cm subcutaneous mass is palpable over coccygeal region without skin fistula or erythematous change. Microscopically, skin dermis and epidermis are not affected by underlying lesion (Figures 2 and 3).

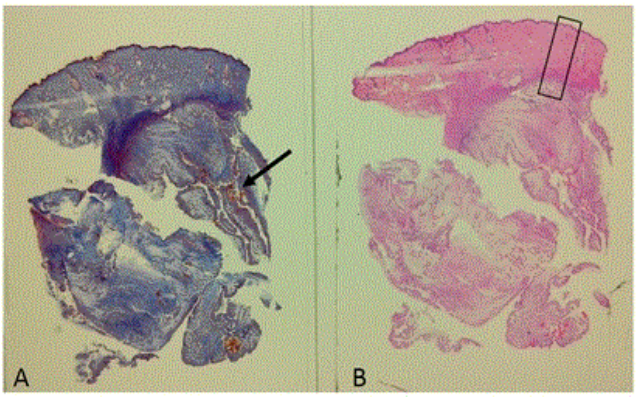

Figure 2: Scanning view of excised skin and underlying irregular cystic cavities and infolding inner wall (arrow). (A) Blue staining means presence of collagen fibers by Masson trichrome stain. (B) The enclosed rectangular area is amplified in Figure 2. (Hematoxylin & eosin stain.)

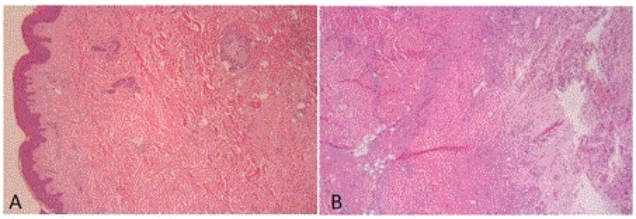

Figure 3: Inset of Figure 1. (A) Unaffected epidermis and dermal stroma. (H&E, 50X) (B) There is a relatively sharp margin between cystic lesion over right side and the unremarkable dermal stroma over left side (H&E, 50X).

The pathologic findings are irregular cystic spaces surrounded by edematous fibrous wall over subcutaneous region (Figure 4).

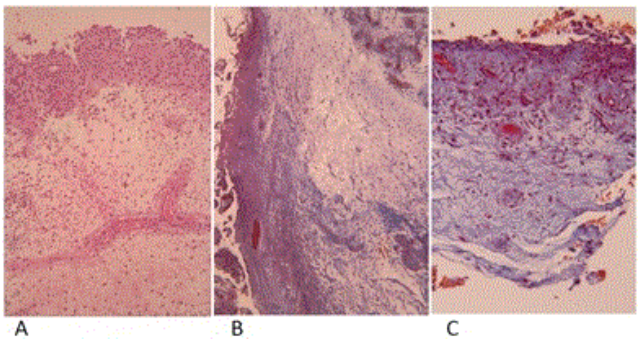

Figure 4: (A and B) Low power view shows edematous bursal wall and proliferation of small blood vessels over inner wall. (A: H&E, 100X, B: Trichrome stain, 50X) (C) High power view exhibits edematous collagenous outer wall and proliferation of small blood vessels over inner wall without marked inflammatory infiltrate (Trichrome stain, 200X).

Some proliferative small blood vessels (Figure 5) and some non-specific chronic inflammatory infiltrates with focally a few neutrophils over inner wall (Figure 6).

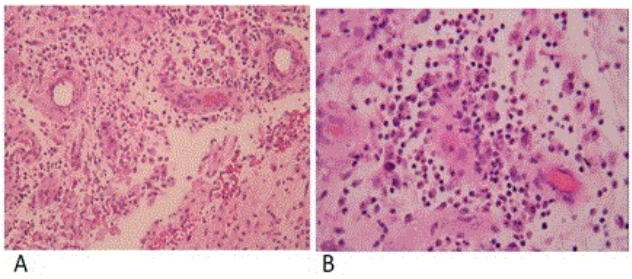

Figure 5: (A) Some lymphocytes and a few plump histiocytes accompanied by a few extravasated RBCs can be seen over focal inner cyst wall. (H&E, 200X) (B) A few neutrophils and plasma cells could be found in focal small areas (H&E, 400X).

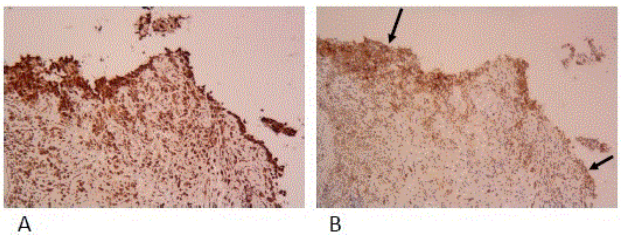

Figure 6: (A) The lining synovial cells and underlying scattered histiocytes are positive immunostaining for CD68. (B) The cell membrane of lining (reactive) synovial cells are positive for EMA immnostaining (arrows), and the underlying smaller histiocytes immnostained on both cytoplasm and cell membrane. (100X).

Fibrinous material (trichrome staining red, and PAS: +) without inflammatory infiltrate over focal inner cavity wall (Figure 7) is identified. Accordingly, bursitis with acute exacerbation or rupture is diagnosed.

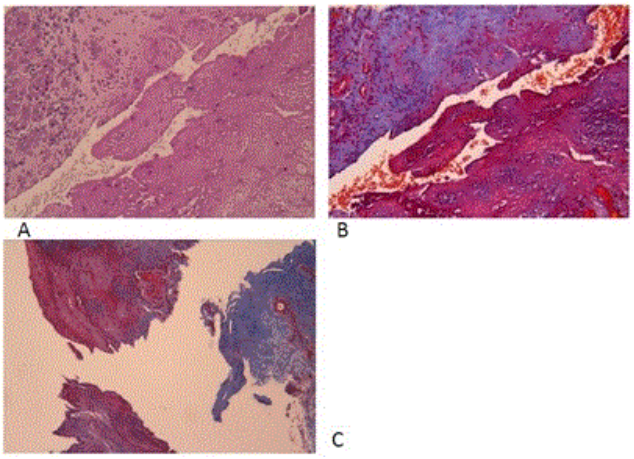

Figure 7: (A) Positive PAS staining (purple-red) over fibrinous material of focal inner wall. (200X) (B and C) Masson trichrome stain reveals non-collagenous fibrinous areas of focal inner wall as red color (B: 200X, C: 100X).

The differential diagnoses of such coccygeal or ischiogluteal bursitis should include 1. Perianal fistula and abscess, 2. Ruptured epidermoid keratinous cyst with secondary infection and acute inflammation, and 3. Pilonidal sinus inflammatory lesion.

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