

A Rare Case of Cat Scratch Disease Presenting with Splenic Abscess-A Case Report

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Article History	Abstract
<p>Received: 06 June 2023 Revised: 05 Sept 2023 Accepted: 25 Nov 2023</p> <p>CC License CC-BY-NC-SA 4.0</p>	<p><i>Cat scratch disease is a zoonotic infection presenting with usual symptoms such as fever, fatigue, rigor, myalgia, rashes followed by regional tender and painful lymphadenopathy. Other rare presentations include abscess formation in major organs. The main agent is Bartonella henselae. In this study, we describe a patient presenting with abdominal pain and tenderness with prodromal symptoms and microscopically it showed necrotizing granuloma in stellate pattern with palisading histiocytes. The prompt history of having pets, classical microscopy and by ruling out other causes of necrotizing granuloma, the diagnosis of cat scratch disease is obtained.</i></p> <p>Keywords: Cat Scratch Disease, Splenic Abscess, Stellate Necrotizing Granuloma</p>

1. Introduction

Cat scratch disease is one of the commonest entities to present as necrotizing lesion but usually not suspected. A necrotizing granuloma is an area of inflammation in which tissue has died, predominantly said to be of infectious origin other causes include autoimmunity, drugs, neoplastic condition and allergy. This disease is said to be contagious from bite or even scratch from a cat.

Case Details

35-year-old male presented with abdominal pain for 2 days and history of fever on and off for 3 months with no history of abdominal distention, bloating, melena, hematemesis. Patient is a known case of diabetes mellitus for 5 years not on medication and alcoholic for 15 years. Patient gives a past history of surgery in the abdomen for intestinal perforation 15 years back. On Examination there was Tenderness present over left and right hypochondrial and epigastric region with midline guarding. Normal bowel sounds present. Ultrasonogram findings shows splenic abscess with subdiaphragmatic extension. Hence Splenectomy surgery was done. Resected specimen was sent to histopathology for confirmation and further evaluation. Grossly we received an already cut open spleen measuring 16x10x3.5cm. Outer surface showed focal disruption of capsule. On serial cut section, cut surface appeared grey brown, firm with multiple small cavities filled with purulent material.

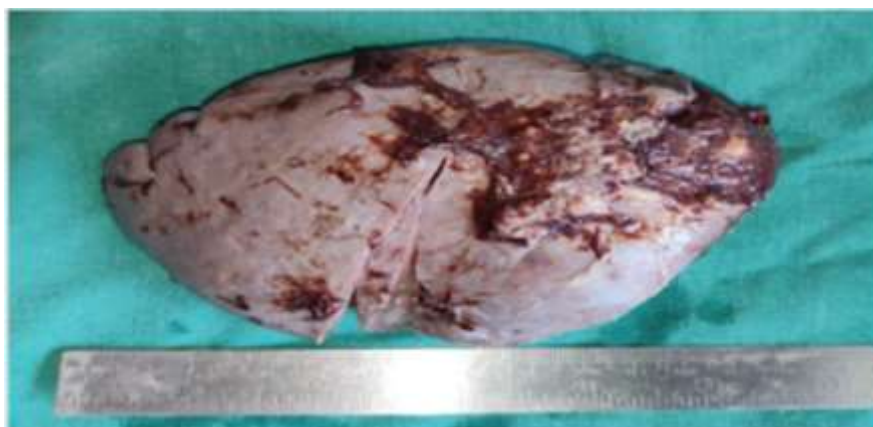


Figure 1: Gross –Splenic Abscess

On histopathological examination, Sections showed spleen with intact capsule, congested red pulp and white pulp showing lymphoid hyperplasia. Splenic parenchyma showed architectural distortion

by multiple variably sized necrotizing granulomas resembling stellate granuloma composed of central necrotic area with fragmented neutrophilic debris palisaded by histiocytes, lymphoplasmacytic infiltrate, foreign body giant cells and few langhan type of giant cells. Also seen were extensively scattered inflammatory cells composed of lymphocytes, plasma cells, eosinophils, few neutrophils and hemosiderin laden macrophages.

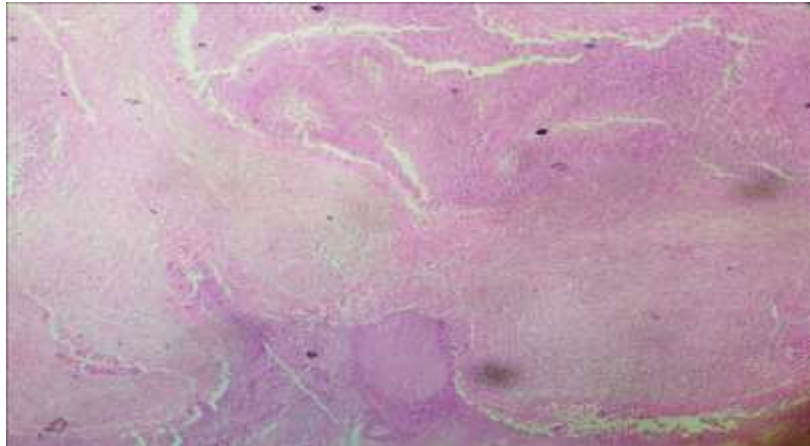


Figure 2: Stellate shaped Necrotizing granuloma of the Spleen

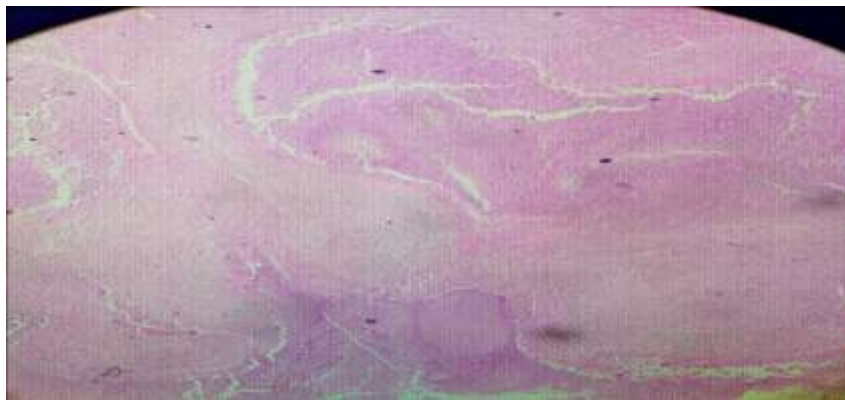


Figure 3: Necrotizing granuloma with palisading histiocytes

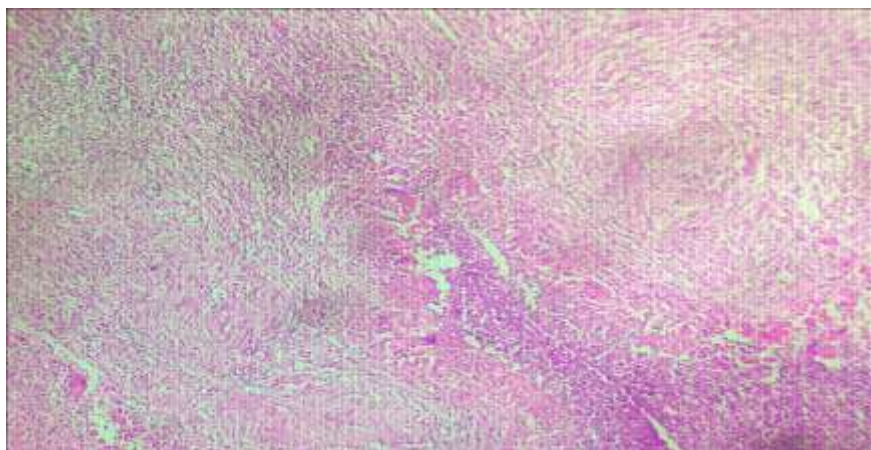


Figure 4: Palisading histiocytes –high power view

2. Results and Discussion.

In relation to surgical interventions, both Yuan ⁽¹⁵⁾ and Sulejmanajic ⁽³³⁾ highlight the importance of a careful and minimally invasive surgical technique to reduce the risk of postoperative complications in patients with CKD. This precise and meticulous surgical approach is essential to preserve tissue integrity and minimize risks associated with procedures, emphasizing the importance of specialized and personalized care for this vulnerable population.

3. Conclusion

The unusual presentation of Cat scratch disease as splenic abscess with stellate granuloma is usually a rare entity and most often a missed diagnosis. Prompt diagnosis and treatment with respective

antibiotics and abscess drainage will save life of the patient. Ruling out all other causes of necrotizing granuloma is of utmost priority using special stains.

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