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PLASMA CELL GRANULOMA OF THE CARDIOESOPHAGEAL REGION*

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The plasma cell granuloma also described as inflammatory pseudotumor, is a relatively rare entity which occurs mainly in adults[1-3]. The lung and conducting airways are the most frequent sites[1] but they have also been reported in extra-pulmonary sites[2-6]. Most of the plasma cell granulomas described in children have been reported in the lung[1,7,8].

In this report we present the case of an eight-year-old girl with a plasma cell granuloma in the cardioesophageal region. To our knowledge no case of a primary cardioesophageal plasma cell granuloma has so far been reported in a child.

Case Report

An eight-year-old girl was admitted to Hacettepe Children's Hospital with the complaints of difficulty in swallowing and about a 7 kg weight loss over the previous two months.

The physical examination revealed slight emaciation. No abdominal mass was palpated. Routine laboratory studies were within normal limits. Roentgenographic examination revealed a stenosis in the cardioesophageal region.

At laparotomy a solid firm mass was palpated in the cardioesophageal area and a proximal esophago-gastrectomy was performed. The patient made a good recovery after some postoperative complications. The patient has been followed postoperatively for five years and no clinical evidence of recurrence has been observed.

Pathological Findings

The lesion measured 8 x 6 x 5 cm and was slightly lobulated with a firm consistency. When the resected specimen was opened, a thickening in the

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cardioesophageal region which extended to the fundus and had two lobulated masses (2.5 x 3 x 0.7 cm and 2 x 2 x 0.6 cm) were found. The cut surfaces of these lesions were pinkish to whitish gray in color and this appearance involved the submucosal, muscular and serosal layers (Figure 1).

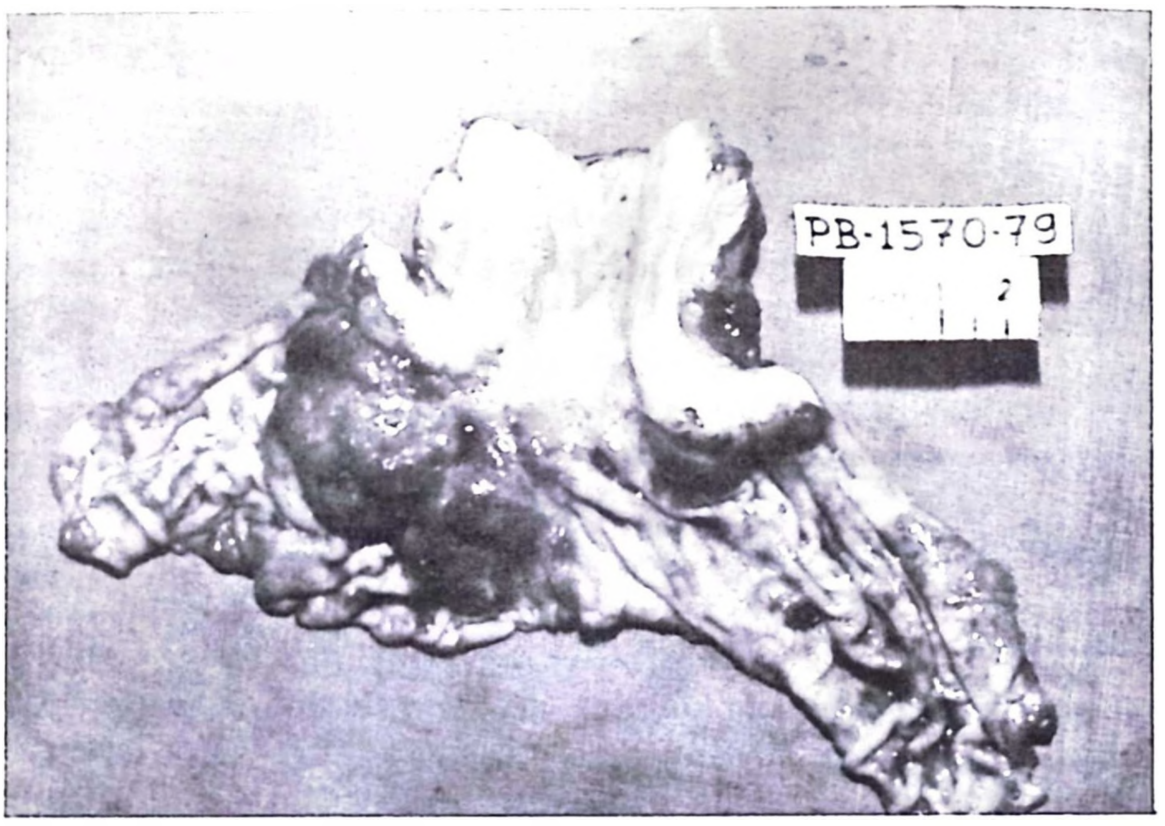

Figure 1

Cut surface of the lesion in the cardioesophageal region.

Microscopic examination revealed a pseudotumor composed of varying amounts of fibroblastic and collagenous fibrous tissue with some areas of hyalinization and chronic inflammatory cells. Plasma cells were strikingly prominent and Russell bodies were frequent. Most of the plasma cells were mature and binucleated forms were also present. Next to the plasma cells the lymphocytes were distributed throughout the lesions forming some aggregates. Fewer neutrophilic leukocytes were seen in some areas. No mitotic figures were observed (Figure 2).

To a large extent the lesion replaced the submocosa and the muscular layer and in some parts, intramuscularly extended down to the serosa. The mucosa of the esophagus and the stomach were intact in all sections.

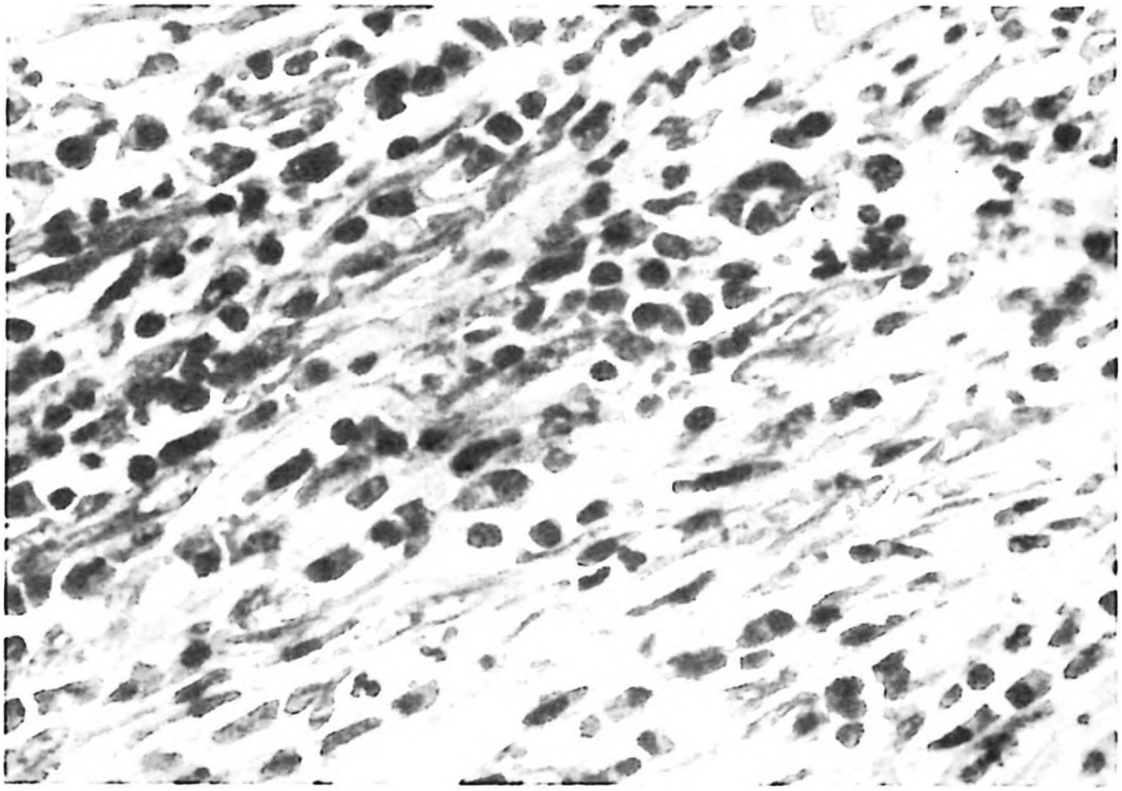

Figure 2

Light microscopic picture of the lesion illustrates plasma cells and other cellular elements (HE x 400).

Discussion

Two cases of plasma cell granulomas of the stomach, one in the cardioesophageal and one in the prepyloric region have previously been reported in adults[2,5].

The case of a 14-year-old child who had an intraabdominal plasma cell granuloma with involvement of the wall of the stomach has been reported and also that of a 12-year-old child with a plasma cell granuloma of the lung with involvement of the lower third of the esophagus and another case of an 8-year-old child who had a mediastinal plasma cell granuloma with involvement of the esophagus[1,3,8]. Primary involvement, however, of the cardioesophageal region, has not been reported in children.

Plasma cell granuloma is a rare benign lesion of unknown etiology. An underlying inflammatory process, or abdominal surgery has been thought to be the cause in some cases[1,3]. A small central ulcer present in two adult patients with plasma cell granuloma of the stomach, was thought to be a secondary process[2,5].

In our case there was no evidence of gastrointestinal or abdominal symptoms suggesting an infection or parasitic infestation nor was there any history of abdominal surgery and trauma. The etiology also remains uncertain in this case.

Summary

The case of plasma cell granuloma of the cardioesophageal region in an eight-year-old girl, and the surgical treatment of it, is reported. Primary involvement in this localization has not been previously described in children. The patient has been followed up postoperatively for five years and no clinical evidence of recurrence has been observed.

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