



## A Rare Case of Stomach Plasma Cell Granuloma in an Adult

### ARTICLE INFO

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Case Report

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### ABSTRACT

**Aims** Study of a rare lesion in the stomach namely the plasma cell granuloma presenting as gastritis.

**Patient & Methods** Evaluation of rare disease in the stomach which was presented as gastritis and was on treatment for long time. Now, by new methodology by biopsy and HPE study it is diagnosed as plasma cell granuloma and treated accordingly.

**Findings** As per Histopathological report fragments of superficial mucosa with erosion, congestion and edema of lamina propria. Sheet of plasma cells are seen in the lamina propria admixed with few lymphocytes and occasional eosinophils with no evidence of dysplasia.

**Conclusion** All chronic gastritis to be treated, observed and evaluate for rare phenomenon like plasma cell granuloma.

**Keywords** Inflammatory; Lesion; Plasma Cell Granuloma; Pseudotumor; Stomach

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## Introduction

Plasma cell granuloma is an inflammatory condition mostly affecting the lungs but it can occur in every organ of the body since it is a non-neoplastic condition the treatment also depends on the lesion. Plasma cell granuloma don't have any affinity to any sex or age group [3].

The aetiology is unknown but some considerable known facts that, it may arise due to periodontitis, periradicular inflammation due to the presence of a foreign body or may be due to an idiopathic antigenic cue. The treatment of this condition is also unclear but some respond to steroid therapy but then only considered one id complete resection but in some cases the location of the tumor like orbit, brain and so on makes it difficult for total resection [3,4].

## Patient and Methods

### Case presentation

58-year-old man came to the hospital OPD with one week of diffused abdomen pain insidious in onset and gradually increased. No relevant aggravating or relieving

factor. Soon after taking liquid and solid food vomiting after sensation of pain. Vomit contains partial digested food materials not foul-smelling blood or bile stained. No previous history of retrosternal burning sensation or chest discomfort or pain while swallowing. No previous history of any type of fever trauma in the lower chest or abdomen. No difficulty in passing urine or motion or tarry stools. Bladder and bowel habits seems to be normal the patient used to be on mixed diet. Not a known case of systemic hypertension, bronchial asthma, diabetic mellitus, jaundice in the past. History of alcohol intake for past 5 years - not regular. Denied history of betel nut, tobacco chewing or smoking. Not a known case of tuberculosis or any other disease in the past. Drug allergies not present. Father died due to alcoholic cirrhosis. Mother is a diabetic patient.

### General examination

- Patient is conscious and cooperative, moderately built and nourished.
- After getting a prior consent examination done
- PR - 88/min volume and tension good
- BP - 140/80mmgh
- SpO<sub>2</sub> - 97% in room air
- Temperature - 97.8°F
- Cardiovascular system - heart sounds normal and no murmur
- Respiratory system - bilateral air entry good no added sounds
- Central nervous system - no abnormalities could be made out
- On examination of abdomen - not distended all quadrants move with respiration abdomen soft mild tenderness present on deep palpation on the epigastric region no organomegaly.

- All quadrants resonant on percussion
- Hernial orifices are free
- Examination of external genitalia - scrotum and penis clinically normal

### Investigations

- Routine blood investigation along with liver function test and renal function test within normal limits
- ESR was 40 mm/hr
- Urine routine no abnormality detected
- Ultrasonography abdomen - stomach wall thickening involving the antrum with narrowing of lumen giving TARGET SIGN appearance
- Speciality opinion
- Gastroenterology opinion in obtained
- Esophagogastroduodenoscopy - The scopy is introduced into the duodenum without difficulty and congested mucosa and poor distensibility of antrum noted. Suggestive of gastropathy and biopsy was taken.
- Histopathology examination - reveals fragments of superficial mucosa with erosion, congestion and edema of lamina propria.
- Sheet of plasma cells was seen in the lamina propria admixed with few lymphocytes and occasional eosinophils with no evidence of dysplasia. Suggestive of Plasma cell granuloma
- Anti-HIV spot came as negative

### Findings

Patient comfortable with antacids and proton pump inhibitors and not willing for any more investigation. Patient was advised to come for regular follow up during the follow-up also the patient feels comfortable with no other complaints.

### Discussion

Plasma cell granuloma is otherwise called "inflammatory pseudo tumor". The ethology of this lesion is debatable since it is a rare non-neoplastic tumor [5]. It is called by many names alike inflammatory myofibrohistiocytica proliferation, inflammatory myofibroblastic tumor and xanthomatous pseudo tumor [6].

The pathogenesis of plasma cell granuloma is indistinct. The presence of foreign bodies or foreign antigen like Epstein Barr virus and Human Herpes virus 8 leads to periradicular inflammation, or periodontitis are associated with Plasma cell granuloma [7,8].

Although lung is the most common site for plasma cell granuloma it can occur in various other organs [9,10]. Less than 5% of plasma cell granuloma are extra pulmonary and out of that orbit is the most common location followed by the meninges, paranasal sinuses, infratemporal fossa, and soft tissues [11, 12].

Although often benign, these tumors can mimic malignancy, develop symptoms as a result of their

size or location, and pose a diagnostic challenge to doctors, pathologists, and radiologists. Few cases of recurrence are reported, so it is crucial to consider the diagnosis and administer appropriate care [13,14]. In the above case presented to us with features suggestive of acute gastritis but after taking a biopsy the histopathological findings show plasma cell rich inflammatory infiltration composed of polyclonal plasma cells [15]. The treatment is based on the lesion size and extension, it comprises of scaling and excision biopsy.

## Conclusion

Granulomatous tissue from the biopsy is not considered to have any glimmer of neoplastic activity. Since the lesions are rare and lack of sequential observations, the hypothesis that plasma cell granuloma is merely one of the representative aspects of the granulomatous stages of the process occurring in the plasmacytoma does not appear to have sufficient evidence. The etiology of plasma cell granuloma is strange where it is presenting as an inflammatory reaction that occurs in the breast and thyroid tissue. There is no affirmation the etiologic agents like parasites, fungus, luetic, or venereal agents was found for specific granuloma. There is no immunological reaction could not be found in the plasmacytic proliferation. Cases from time to time reported of gastric plasmacytoma are found in literature, the Roar very few reported cases of gastric lesion of the type presented in this discussion. This patient initially presented with vomiting and minimal abdominal pain all the features was miss diagnosed as gastritis but after further evaluation of the patient with the specialty support biopsy report and the lesion was minimal, he was managed conservatively.

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