

Conjunctival Pyogenic Granuloma – A Case Report

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INTRODUCTION

Pyogenic granuloma (PG) also known as lobular capillary haemangioma is a benign vascular tumour that is seen on the mucous membranes and in skin sometimes. It can be found intravascularly or subcutaneously. It mostly arises spontaneously and grows rapidly.¹ Pyogenic granuloma may appear small or large, smooth or rough & lobulated, or as reddish exophytic vascular nodules that can grow rapidly. Sometimes large lesions become lobulated which resemble a mushroom or pediculated tumour. PGs have a tendency to bleed profusely. Bleeding is the most common symptom of presentation. Pyogenic granuloma is an overgrowth of tiny blood vessels in large numbers.

PRESENTATION OF CASE

A 10-year-old male boy was brought by parents to ophthalmology clinic with chief complaints of swelling over right upper eyelid for 2 weeks and bleeding discharge since 2 months. The swelling had increased rapidly in size over the past 15 days causing irritation to the eye. Patients had used local anti-inflammatory eye drops and steroids, but symptoms were not relieved.

- Parents gave history of frequent eyelid rubbing by the patient,
- Patient did not have history of any trauma,
- No history of similar presentation in past,
- No history of chalazion.

On Ophthalmic Examination

In right eye, vision was 6 / 6; swelling was present on upper eyelid. Margins of upper eyelid were clear. The lobulated mass (pedunculated) was seen on upper tarsal conjunctiva of size 1 cm X 0.5 cm X 0.3 cm in size. The mass was cystic with blood collection in it. Cornea was bright. Iris had normal colour and pattern. The pupil was of normal size reacting to light. No changes in lens seen, left eye was normal.

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CLINICAL DIAGNOSIS

As the growth was single, red, pedunculated papule and it was present on mucosal surface i.e., conjunctiva, the size of the growth increased rapidly over a period of 15 days, so clinical diagnosis of pyogenic granuloma was made.



Figure 1. Preoperative Image of Conjunctival Pyogenic Granuloma

DIFFERENTIAL DIAGNOSIS

Acquired sessile haemangioma, Kaposi's sarcoma, cavernous haemangioma and glomangioma.

PATHOLOGICAL DISCUSSION

The haematoxylin and eosin (H&E) stained section studied shows discontinuous stratified squamous epithelial lining along with fibrous septate formation and numerous vascular spaces in underlying stroma. These finding were suggestive of pyogenic granuloma.

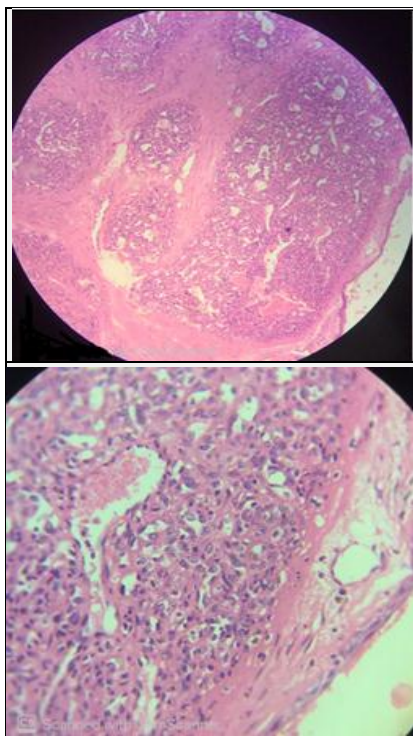


Figure 2. H & E Section of Excised Mass



Figure 3. Postoperative Image after Excision of Conjunctival Pyogenic Granuloma.

DISCUSSION OF MANAGEMENT

Since pyogenic granulomas do not regress on their own, they may bleed, ulcerate, or be cosmetically disfiguring, they may necessitate treatment on these grounds. Partial excision or curettage may lead to recurrence; hence, complete primary excision is preferred.² In any surgical procedures, maintaining structural integrity remains a challenge.³⁻⁵ Post-operative follow-up evaluation is also very important.⁶⁻⁷

In our patient, we have done complete surgical resection, and the sample is sent for histopathology, which also suggested conjunctival pyogenic granuloma.

DISCUSSION

Pyogenic granuloma, also known as granuloma pyogenicum or lobulated capillary haemangioma, refers to a common, acquired, benign, vascular tumour that arises in skin and mucous membrane.^{8,9} The term pyogenic granuloma is a misnomer.

The aetiology of pyogenic granuloma is not known properly. Moreover, it is said to be due to imbalance of pro-angiogenic and anti-angiogenic factors, which results in rapid proliferation in capillary of neovascular, friable, and lobulated character.¹⁰ In one review, the incidence peaked in the second decade of life, and the lesion, are more commonly seen in males but the mucosal pyogenic granuloma is more common in females.¹¹

The lesion generally seen as a single, red, pedunculated papule that is very friable. Less commonly, it may present as a sessile plaque. It shows rapid growth, and a surface often undergoes ulceration. It is often seen on cutaneous or mucosal surfaces. Among the mucous surfaces most common is oral cavity. Rarely, it may occur at other sites like within the gastrointestinal tract, and conjunctiva.

FINAL DIAGNOSIS

Conjunctival pyogenic granuloma in right eye.

CONCLUSIONS

Though pyogenic granuloma is relatively a common condition, it has to be differentiated from other lesions with similar

clinical presentation, with appropriate treatment modalities it yields excellent results and should not be missed.

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