



## GRANULAR CELL TUMOUR OF APPENDIX – A CASE REPORT

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### ABSTRACT

A granular cell tumor (GCT) is typically a benign neural tumor of Schwann cell origin that occurs in the 4th to 6th decade of life usually as a solitary painless nodule in the dermis or subcutis. It can also be found in internal organs including the larynx, bronchus and gastrointestinal (GI) tract. Here we describe a case of granular cell tumour of base of appendix found in a 26 years old male.

### KEYWORDS

Granular cell tumour; Base of appendix; Appendicectomy.

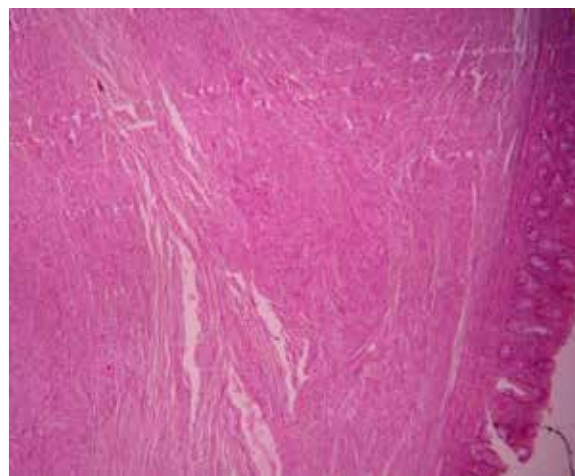
**Introduction:** A granular Cell Tumor (GCT) is a rare, usually benign, soft tissue neoplasm. GCT has been found most frequently in skin or subcutaneous tissues of the chest and upper extremities, tongue, breast and female genital region [1]. GCT is rarely found in the gastrointestinal tract, with the esophagus representing the preferred location [2]. Colonic GCT is an exceedingly rare neoplasm that is usually found incidentally on colorectal examinations [3]. Most studies represent case reports describing GCT as a solitary mass lesion. In this article, we report a case of a man who was found, during appendicectomy and further histopathology to have GCT involving the base of appendix.

**Case report:** A 26 years old male came to emergency with complaints of pain in right iliac fossa along with vomiting. On examination we found that patient was having tachycardia (pulse rate 112/ min), soft abdomen with severe tenderness over right iliac fossa. Blood parameters showed neutrophilic leukocytosis and USG told nothing except probe tenderness over right iliac fossa. Our clinical suspicion was that the patient was suffering from acute appendicitis and we planned to go for appendicectomy.

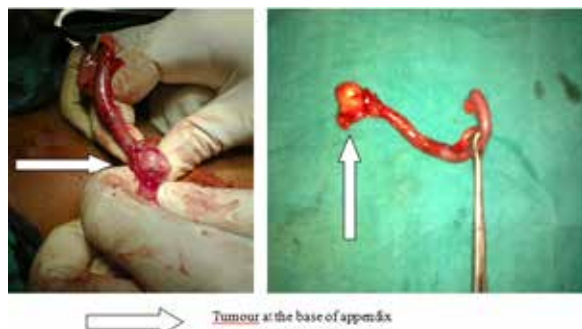
On exploration we found a nodular growth at the base of appendix and we did the appendicectomy. Post operative period was uneventful.

fibrosis and foci of fat infiltration in submucosa. Lumen contains faecal matter.

Section shows granular cell tumour in appendiceal wall. Proximal resection margin shows well circumscribed nodule of granular cell tumour is present with overlying unremarkable mucosa.



**Granular cell tumour at the base of Appendix.**



Blocks were prepared from tip of appendix (A) and tissue from nodular growth (B) for histopathological examination.

### Microscopic finding:

Section shows an intact mucosal lining. There are submucosal reactivelymphoid follicles, moderate lymphocytic infiltrate,

### Discussion:

Granular cell tumor is believed to originate from the Schwann cells. A close association of GCTs with peripheral nerves has been documented [4], and reactivity to S-100 immunostain, both nuclear and cytoplasmic, confirmed its origin of Schwann cells. In the gastrointestinal tract, GCTs are rare and mostly found in the esophagus, followed by the colon [5]. Colonic GCTs are extremely rare lesions, most of which present as solitary nodules. Endo et al [6] reported 33 cases of colorectal GCT in Japan, and Rossi et al [7] found 55 patients diagnosed with GCTs of the colon in reviewing the literature in 2000. Most of the reported colonic GCTs have been typically found in the cecum, rectum, anal canal and ascending colon. Husain Saleh et al reported a case of multiple synchronous granular cell tumors involving the colon, appendix and mesentery in a 62 years old female [8]. Yamada et al [9] reported a case of eight GCTs all of which were in the ascending colon. Melo et al [10] reported a case of 52 GCTs, spanning the entire colon from cecum to sigmoid colon. He suggested that in such

cases, a long period of observation with repeated colonoscopy may be more appropriate than an immediate aggressive approach. Local surgical excision is curative for benign granular cell tumors. Wide en bloc excision is recommended for malignant lesions.

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