

# Intra Abdominal Multiple Haemangiopericytoma

Pages with reference to book, From 170 To 172

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## Abstract

A patient with intra-abdominal haemangiopericytomas was seen, who presented with generalized abdominal pain and multiple masses in the abdomen, masses were of various sizes. Laparotomy revealed multiple tumours of various sizes scattered all over the abdomen, in line with the blood vessels of mesentery, omentum and abdominal wall. Multiple abdominal haemangiopericytomas were suspected. Diagnosis was confirmed on histopathological examination.

## Introduction

Haemangioma are true blood vessel tumours, which may be present at birth or occur subsequently. Haemangiopericytoma is a rare vascular tumour first described by Stout and Murray (1942). It arises from the pericytes of Zimmerman of capillaries and arterioles of solid or hollow viscera in the abdomen. It may also arise from capillaries and arterioles of subcutaneous tissues. Although uncommon, it has been reported in brain, lungs, and parotid glands. It may be multicentric in origin and benign or malignant in nature.

Intra-abdominal haemangiopericytoma may arise from retroperitoneal structures (Herdman, 1953; Hakala et al, 1970); from mesentery (Stout and Cassel, 1943) and from omentum (Stout 1949; Goldberger and Schein, 1968). In hollow viscera it can arise from stomach (Marino, 1959) duodenum (Binder et al., 1973), jejunum (Olsen and Wellwood, 1970), colon (Ault et al., 1951) and rectum (Slattery et al., 1956). Black Winckel and Diddamas (1970) have reported 45% of haemangiopericytoma in capillaries of musculoskeletal system and 18% in the intra abdominal organs and retroperitoneal structures.

## Case Report

A 50 year old man was admitted to the Medical Unit 'A' of Khyber Hospital, Peshawar, with the complaints of recurrent vomiting and attacks of abdominal pain for seven months. He also noticed masses in his abdomen which were progressively increasing in size. He further complained of lack of appetite and loss of weight.

A moderately built middle-aged man, slightly anaemic, pulse rate 80 per minute and blood pressure 120/70 mmHg.

Abdomen looked full. There were nontender masses of various sizes all over the abdomen, some of them were even mobile. Largest mass was in the right hypochondrium. Other systems were normal.

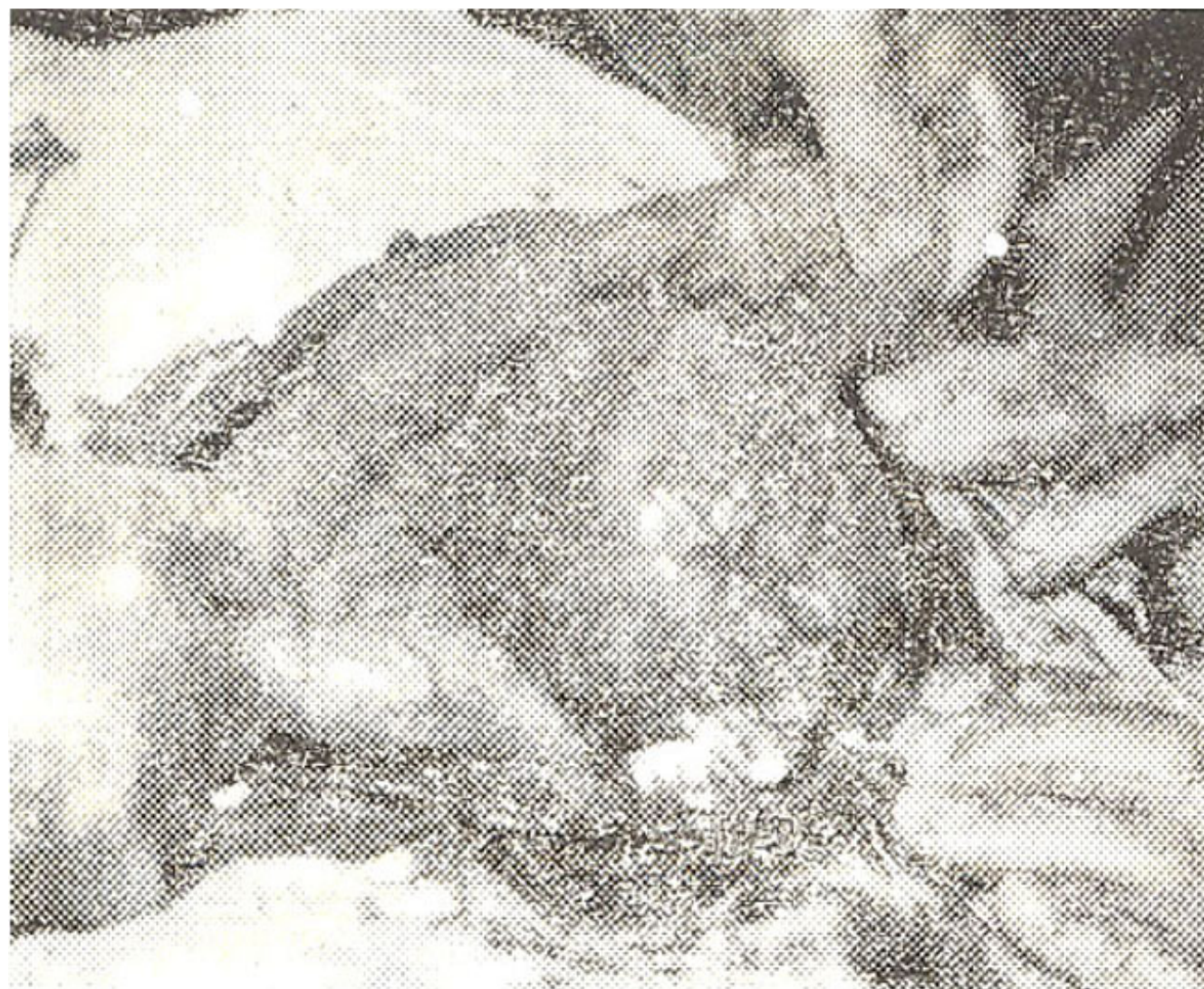
Investigations:

Haemoglobin was 12 gm% ,total and differential counts were normal, ESR was 36 mm 1st hour.

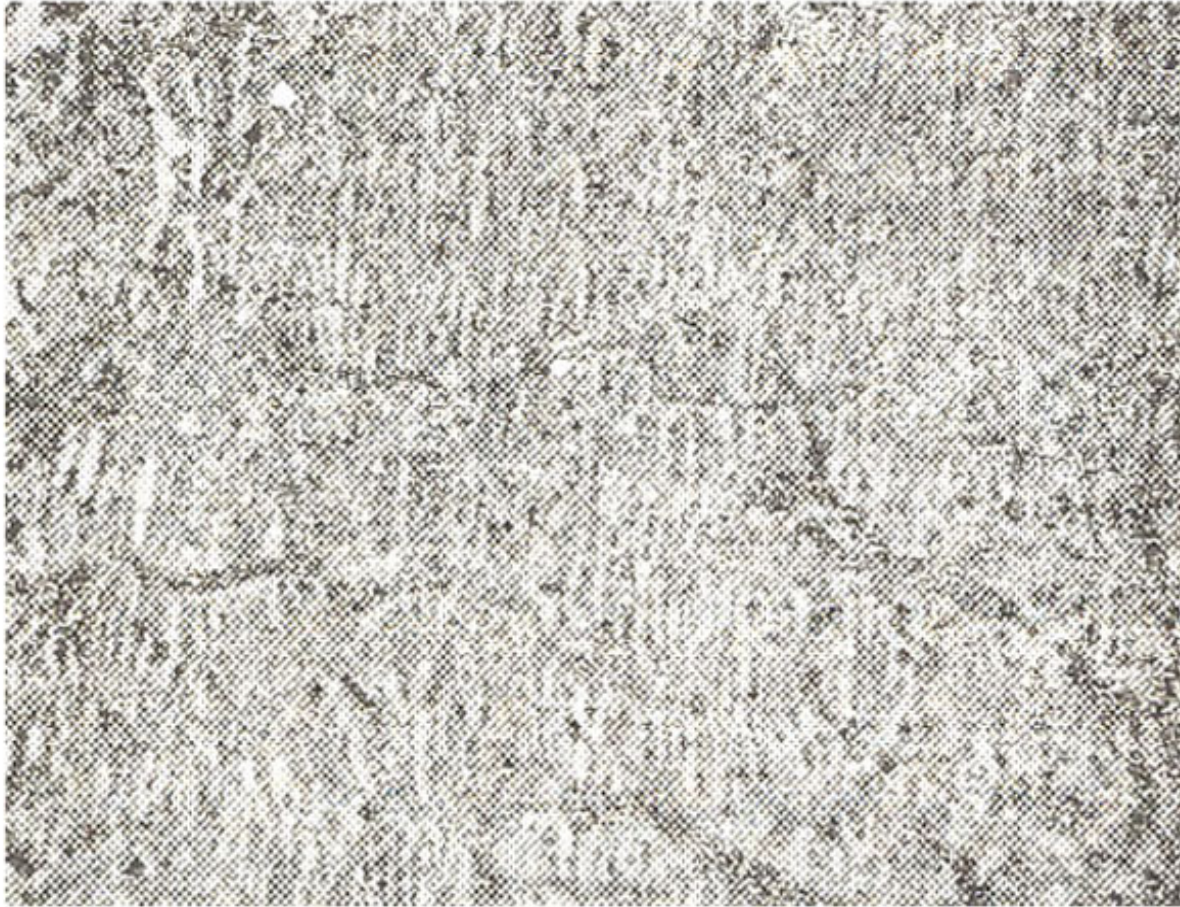
Bleeding time, coagulation times, and urine examination were normal. Fasting blood sugar was 90 mg %. Casoni's test was negative. Exploratory laparotomy revealed haemorrhagic fluid in peritoneal cavity; there were multiple masses of various sizes attached to the omentum mesentery and abdominal wall. These masses were highly vascular with big veins on the surfaces of these masses. Most of the masses were removed, the biggest one was 15 cm in size. No extra abdominal metastasis was seen.

Histopathological studies of these masses revealed haemangiopericytoma (Figure 1 and 2).

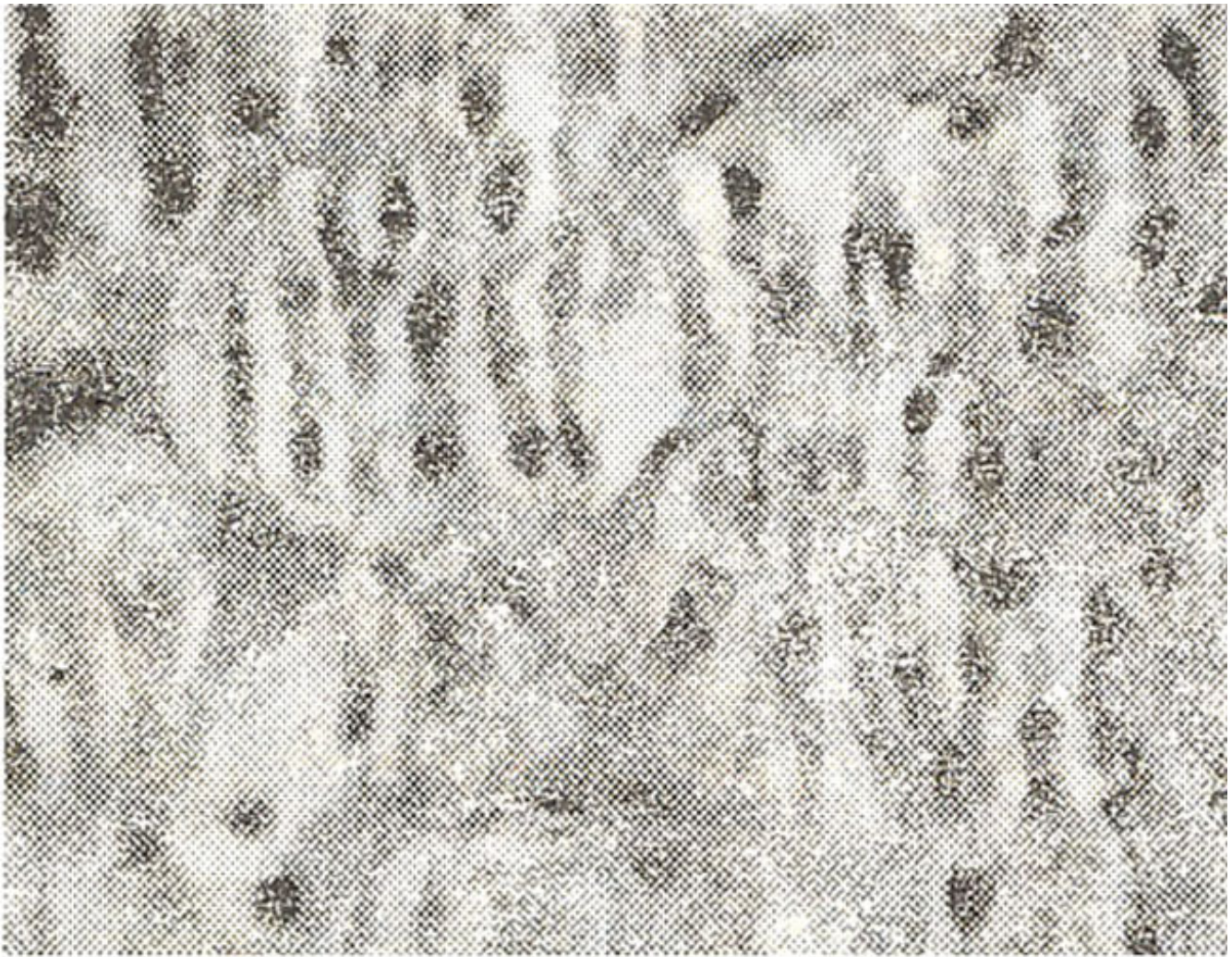
*Fig. 1: Shows large number of tumours in Mesentery and omentum.*



*Fig. 2 :* Microphotograph shows groups of round, oval, spindle shaped cells, closely associated with thin walled blood vessels.



*(a)* High power view of the same slide.



*(b) Low Power :* Section shows blood spaces surrounded by proliferating oval and spindle-shaped pericytes.

The patient died on 4th post-operative day.

### **Discussion**

Haemangiopericytoma at first sight resembles the haemangioendothelioma with numerous capillary channels surrounded and enclosed within nests and masses of round endothelial cells; however, more careful examination discloses that the endothelial cells are somewhat organised and resemble the cells of glomangioma. Silver impregnation has shown that these are pericytes rather than endothelial cells. These tumours were first thought to be benign, but recent studies have disclosed that as many as 50% are malignant (Robins, 1967), because of local invasiveness of the tumour or its spread into the adjoining structures. Twelve percent metastasize to the lung, bones, and liver through haematogenous spread. Regional lymph nodes are sometime affected (Stout, 1949).

Occasionally, the patient may have hypoglycaemia (Howard and David, 1959) which is attributable to the insulin-like substances, which are secreted by the tumour cells, or by the excessive glucose

utilization by the primary or secondary tumour masses, because their excision has shown to abolish hypoglycaemia. Haemangiopericytomas are usually less than 10 cm in size. A retroperitoneal 30 cm in diameter was reported by Binder et al. (1973) which was retro-peritoneal and was displacing the aorta and the ureter.

### **Treatment**

The ideal treatment is surgical excision of the tumour masses, with wide excision of tissues, because of the involvement of adjacent structures. Radical removal is apparently a permanent cure in 50% of cases (Fisher, 1960). Radiotherapy and Chemotherapy have also been recommended as palliative measures. The drugs recommended are Actinomycine and fluorouracil.

### **Acknowledgement**

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