

## CASE REPORT- A STUDY OF HYPERTROPHIED PANCREAS IN A CADEVER

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### SUMMARY:

We present a case hypertrophy of pancreas in cadaver of a 45-yearold man during routine dissection. In this case, there is enlargement of pancreas anterioposteriorly and superioinferiorly, and is seen behind the anterior abdominal wall, with marked hypertrophied liver.

**Key Words:** Anterior abdominal wall, Hypertrophied liver, Hypertrophy of pancreas.

### INTRODUCTION:

The pancreas is a gland that is partly exocrine and partly endocrine. The exocrine part secretes the digestive pancreatic juices and the endocrine part secretes hormones.<sup>[1]</sup> The pancreas is a large gland present in close relationship to the duodenum and stomach. It lies obliquely on the posterior abdominal wall, partly to the right of the median plane and partly to the left. Its right end is enlarged and is called the head. Next to the head there is a short, somewhat constricted part called the neck. The neck is continuous with the main part of the gland that is called the body. The left extremity of the pancreas is thin and is called the tail. The head lies in the C-shaped space bounded by the duodenum. The neck is placed behind the pylorus and the body of the pancreas lies behind the body of the stomach.<sup>[2]</sup>

### METHODOLOGY:

During a routine dissection at the Department of Anatomy at the CSMSS Ayurved Mahavidyalaya, Aurangabad, an anatomical variation in the pancreas was observed. The cadaver donated to the Department of Anatomy, was that of a 45-year-old Indian man. After dissection of anterior wall of abdomen, anterior wall is reflected downwards.<sup>[3]</sup> After reflecting parietal peritoneum and loops of small intestine, enlarged and hard pancreas was seen. Following fixation and gross examination, measurements were taken.

### OBSERVATIONS:

After reflection of anterior loop of small intestine, anteriorly hypertrophied, hard and purple colored pancreas is seen along with enlarged liver.

### Location

At the level of upper border of tip of 9<sup>th</sup> costal cartilage i.e. T<sub>12</sub> to L<sub>2</sub>.

Present in right hypochondriac, epigastric and left hypochondriac region, which is overlapped anteriorly by loops of small intestine.[Figure 1]

### Measurements

	Normal <sup>[4]</sup>	Observed
<b>Shape</b>	J shaped, Retort Shaped	Elongated, irregular and expanded at tail
<b>Size</b>	Length: 15-20 cm Breadth: 2.5-3.8 cm Thickness: 1.2-1.8 cm	Length: 25cm Breadth: 5.3 cm Thickness: 2.1 cm
<b>Weight</b>	90 gms	127.3 gms
<b>Texture</b>	Soft, lobulated and elongated.	Hard, non-lobulated and elongated

### PARTS

**Head** - Expanded superio-inferiorly, flattened anterioposteriorly and triangular in shape.

**Uncinate process** - cannot be identified distinctly, fused with head.

**Neck** - Expanded superio-inferiorly and present like a narrow groove.

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**Tail** - Flat and superior-inferiorly expanded which is attached to the spleen at its anterior end.

**Body** - Narrow and elongated, has sharp superior border, sharp inferior border and anterior border cannot be identified. [Figure 2]

### Relations

After reflecting anterior abdominal wall and reflecting peritoneum, relations according to the parts of the pancreas were observed as below.

### Head and neck

Anteriorly: Parietal peritoneum and loops of small intestine were seen.[Figure 1]

Posteriorly: Right colic flexure

### Body

**Anteriorly:** Parietal peritoneum, ligamentumteres and loops of small intestine were seen

**Posteriorly:** Transverse colon, Transverse Mesocolon [Figure 2] and Stomach.

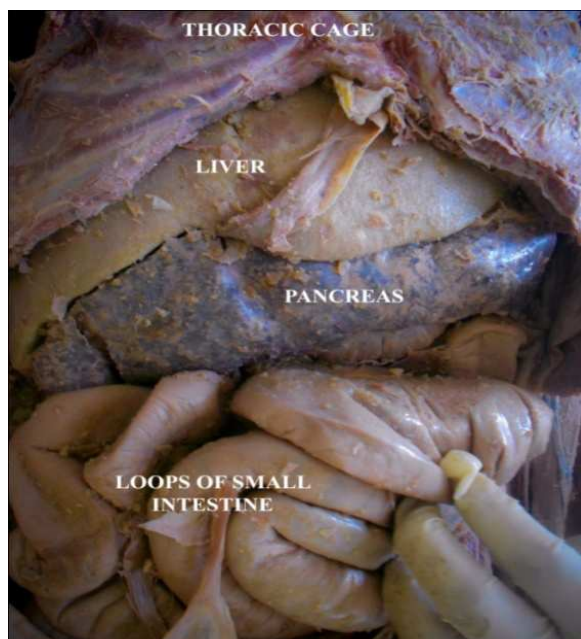


Figure 1

### Tail

**Anteriorly:** Ribs

**Posteriorly:** Left colic flexure

**Right side:** Inferior surface of left side of left lobe of liver. [Figure 1]

**Left side:** Anterior end of Spleen. [Figure 2]

**Superiorly:** Entire border is related with inferior surface of liver. [Figure 1]

**Inferiorly:** Loops of small intestine and Transverse mesocolon. [Figure 1]



Figure 2

### Applied Anatomy

Enlargement of pancreas is the pathological condition which may caused in several diseases like Acute pancreatitis, Chronic pancreatitis, pancreatic pseudocyst, Cyst adenoma, Abscess, Pancreatic cancer.<sup>[5]</sup> Due to this there is change in relation of pancreas with other organs. So for any kind of surgical correction, in such type of cases, all anatomical relations should be studied. It can be done by Ultrasonography, CT scan, MRCP, ERCP, X-ray abdomen.

### CONCLUSION:

Observed enlarged pancreas in above case can be due to any conditions like Acute pancreatitis, Chronic pancreatitis, pancreatic pseudocyst, Cyst adenoma, Abscess, Pancreatic cancer. Further Histo-pathological investigations are necessary for the confirmed diagnosis. After observing and studying the above case it can be said that the condition has occurred due to some pathological and is not congenital.

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