Editorial

Pancreatic Theory of Relativity

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Received: July 03, 2017; **Accepted:** July 11, 2017; **Published:** July 18, 2017

Abstract

Pancreatic duct and parenchyma has different benchmarks in nomenclature. Author discusses the proposition to unify the description system of procedures and surgeries within pancreas according to the direction of pancreatic juice natural flow direction.

Keywords: Pancreas; Duct

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Pancreas is the organ of digestive tract playing an important role in fat and proteins digestion and glucose metabolism. The gland is composed with two embryo buds. Pancreas is conventionally divided from anatomical point of view on the head, isthmus, corpus and tail with no strict border between these parts. The pancreas has the typical configuration; glandular cells form glands with single small duct joining together form larger one and all are drained into main pancreatic duct going along the whole pancreas. Within the head of the pancreas two ducts exists as a consequence of embryo development. Two ducts have usually separate connection with duodenum.

The lexical definition of proximal and distal terms is descriptive and may wear different meaning. According to Oxford Medical Dictionary [1], proximal means situated close to the origin or point of attachment or close to the median line of the body. Distal is situated away from the origin or point of attachment or from the median line of the body. The term is applied to a part of the limb that is furthest from the body; to a blood vessel that is far from the heart; and to a nerve fiber that is far from the central nervous system.

Proximal and distal - this are universally used terms describing the position or relation within human body. There are two main benchmarks; central part of the body and direction of flow (blood or other fluids). The first one is used to express the positioning on extremities. The second one is used to describe the circulatory and digestive system relations. An example might be: "artery stenosis with proximal thrombus formation" or "bowel obstruction with proximal distension". The matter is not so clear concerning the pancreatic gland and duct. The gland has typical excretory duct. The description of pancreatic duct occlusion with proximal distension means that the part of pancreas between occlusion and tail is involved. "Dilation of the pancreatic duct proximal to the tumor" it means left to the tumor. On the other hand the resection of pancreas is sometimes called "distal pancreatic resection" it means that left part of the gland is removed [2]. The part of pancreatic duct after head resection is called distal pancreatic duct. Some authors call Santorini duct as regressed proximal main duct of dorsal pancreatic bud [3]. On that examples is shown dual benchmark related to pancreatic gland. Once the pancreatic juice flow is taken into consideration or the position to the central part of the body. Usually the pancreatic juice flow relations are mentioned by the endoscopists, relation to the duodenum is used by surgeons. However the surgical drainage procedures are performed proximally to obstruction [4].

The problem is not only in nomenclature but it practically exists. On the other hand the sentence "Distal pancreatic resection was performed, proximal to obstruction site" or "Pancreatic head resection was performed and distal part of the gland was anastomosed with jejunal loop" sounds strange. It might be confusing and leads to misunderstanding.

In my opinion it is reasonable to recommend the nomenclature of proximal pancreas to the left part of the gland and distal one, describing the head; according to the pancreatic juice natural flow direction.

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