ANATOMY ETIOLOGY BACTERIOLOGY

PATHOLOGY, DIAGNOSIS AND MANAGEMENT OF

INTRA-ABDOMINAL ABSCESSES

AN ESSAY

SUBMITTED FOR PARTIAL FULFILLMENT

FOR THE MASTER DEGREE IN

GENERAL SURGERY

BY

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بسم الله الرحمن الرحيم

"اقرأ باسم ربك الذي خلق. خلق الإنسان
من علق. اقرأ وربك الأكرم. الذي علم
بالقلم. علم الإنسان ما لم يعلم"

صدق الله العظيم

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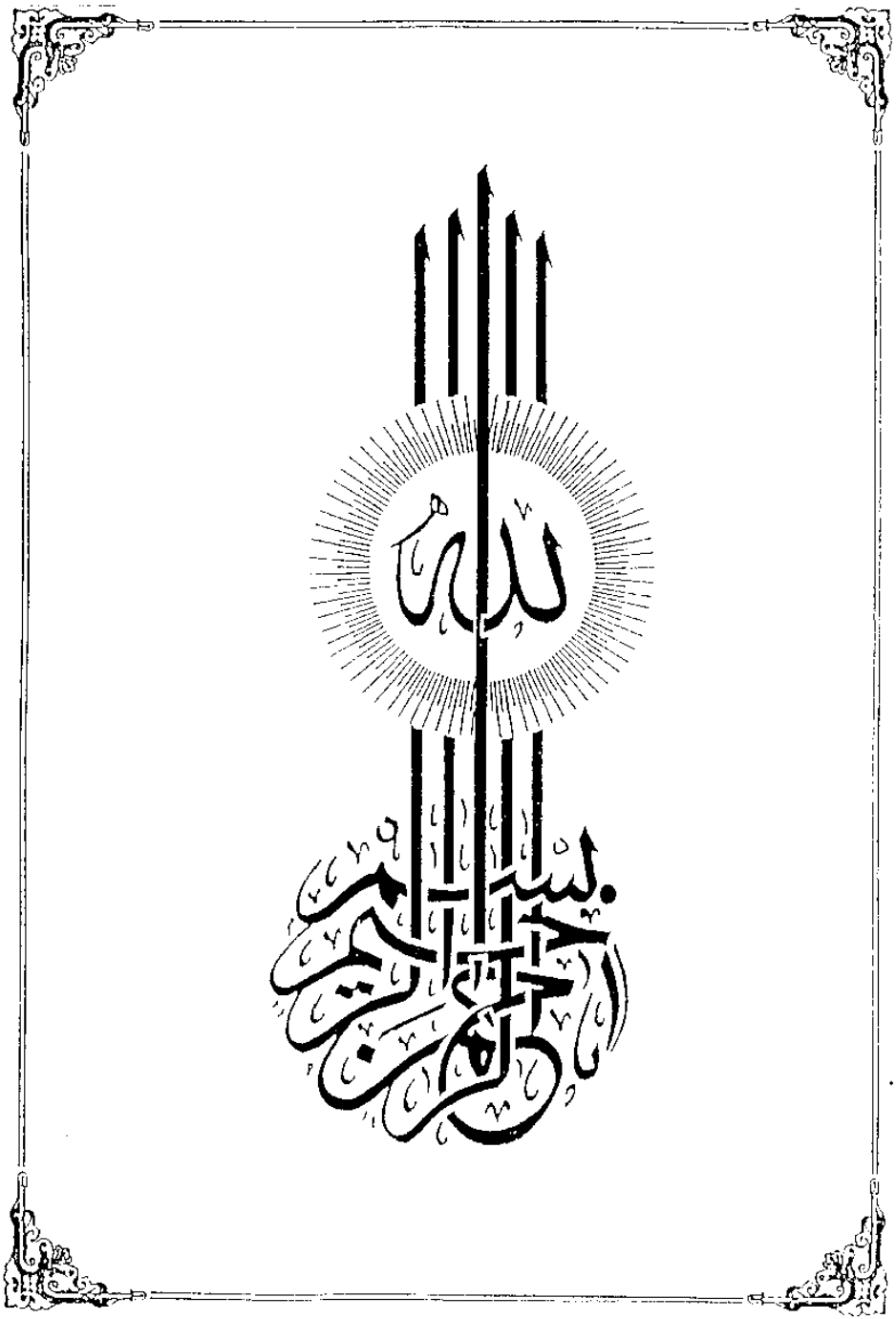

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INTRODUCTION

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I N T R O D U C T I O N

Intraabdominal abscesses are localized collection of pus walled off from the rest of peritoneal cavity by the inflammatory adhesions between parietes, loops of bowel, other intraabdominal viscera, the mesentries or omentum.

An abscess may be solitary or multiple and may be located within the peritoneal cavity proper, within a viscus, or in adjacent retroperitoneum. "Principles of surgery" 3rd edt. "1978".

Abscesses within the solid viscera usually arise following haematogenous or lymphatic dissemination of infection to these organs from septic focus elsewhere in the body.

The intraabdominal abscesses are usually polymicrobic, anaerobic organisms are usually predominent, with Bacteroides species.

Abscesses within the abdominal cavity are troublesome, they are always difficult to diagnose and with the exception of very lowest pointing pelvic abscesses, very difficult to locate by physical examination.

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Several of available radionuclide investigation modalities and their combined application with conventional techniques are highly accurate, [Fataar and Schulman,1981].

Computed tomography "CT" has proved to be the most highly accurate in detection and help in surgical therapy of most abscesses.

Operatire drainage of any abscess still carries a substential mortality.

The classic surgical approach to the abdominal abscesses is surgical exploration and insertion of multiple large calibre drainage tubes.

We are dealing with, subhrenic pancreatic, lesser sac, pelvic, Inter loop, liver and splenic abscesses as regards pathology. Bacteriology, diagnosis and lines of treatment.

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REVIEW OF LITERATURE

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ANATOMICAL CONSIDERATIONS

Anatomy of :

- Subherenic spaces.
- Greater sac .
- Lesser sac .
- Pelvic spaces.

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ANATOMY OF SUBHRENIC SPACES

The transverse mesocolon constitutes a structure dividing the abdominal cavity into supra-and infracolic compartments, the root of the small bowel mesentery furthur divides the infracolic into two spaces of unequal sizes. [Gray's 1980].

The supracolic spaces or subhrenic spaces :

This region is considered to be the portion of the abdominal cavity that extends from the diaphragm above and the transverse colon and mesocolon below. The region is divided into suprahepatic and infrahepatic compartments by the liver.

The suprahatic compartment is subdivided into right and left portions by the falciform ligament.

The infraheptic compartment is similary subdivided by the ligamentum teres and ligamentum venosum. Four intraperitoneal and two extra-peritoneal subphrenic spaces can be recognised [maingot's abd-operation].

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a. Right subphrenic spaces :

This space lies between the diaphragm and antero-superior and right lateral surface of the liver bounded to the left by the faiciform figament which separate it from the left subphrenic space and bounded posteriorly by the coronory right triangalar ligament which separate it from the right extraperitoneal spaces.

b. The right subhepatic space :

Also known as hepatorenal recess, or Morison's pouch which is bounded above and infront by the inferior surface of the right lobe of the liver and the gall bladder below and behind by the right suprarenal gland, The upper part of the right kidney, the descending part of the duodenum, the right colic flexure, the transverse mesocolon and part of the head of the pancrease,,above and behind it extends between the right kidney and the liver as far as the inferior layer of the coronary ligament and the right triangular ligament [Gray's anatomy 36th edition] 1980.

c. Left subphrenic space :

Is a complicated space that was formly subdivided into three separate entities :

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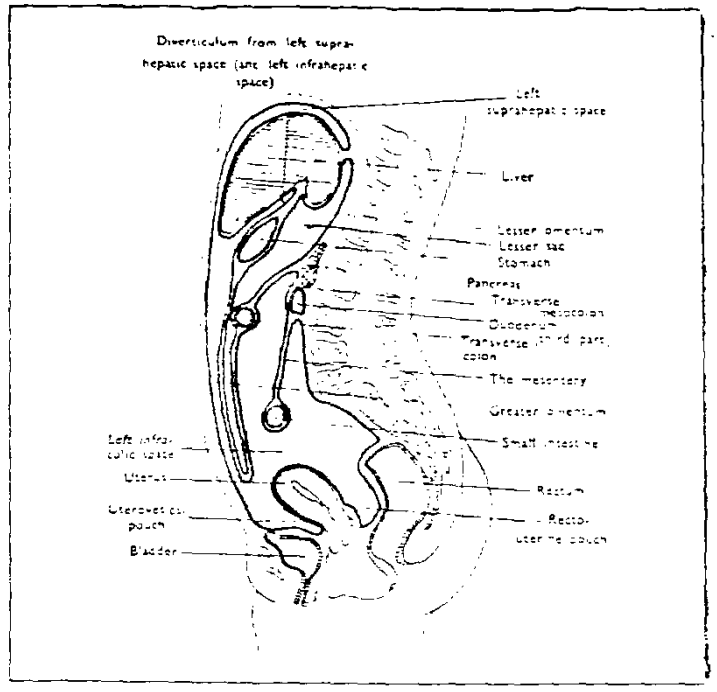
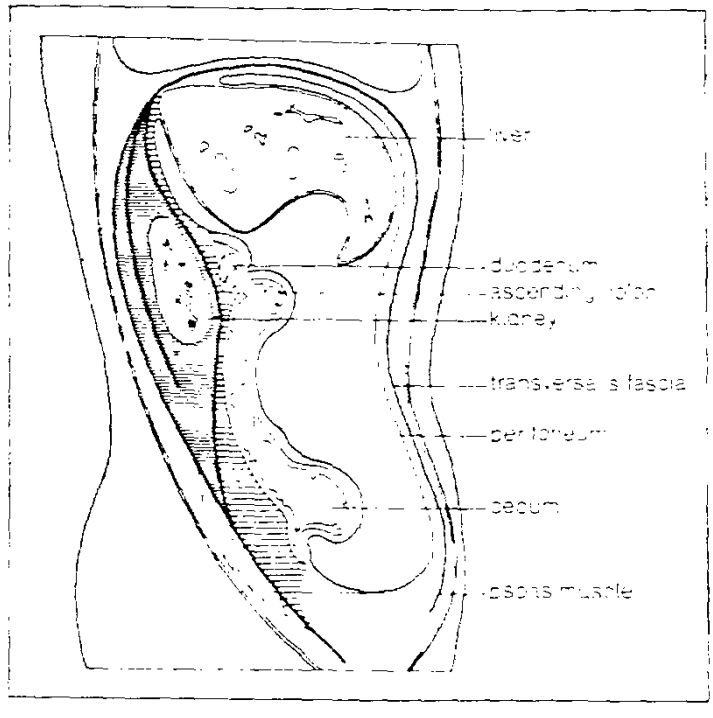


Sagittal section through abdomen to left of median plane, showing left suprahepatic space (left subphrenic space of Mitchell), left anterior infrahepatic space (subhepatic recess of left subphrenic space of Mitchell), and left posterior infrahepatic space (*Source: From Harley HRS. Subphrenic abscess. Thorax 4:1, 1949, with permission.*)



Anatomy of the retroperitoneal spaces. Sagittal cross section on right side. [ ] = Anterior retroperitoneal space [ ] = Posterior retroperitoneal space (posterior and anterior divisions). (*Source: From Goris RJA, Lubbers ELC, et al: Retroperitoneal infection, in de Boer HHM (ed): Intra-abdominal Sepsis. Utrecht: Bunge, 1979, with permission.*)

Quoted from Maingot's abdominal operation, 1985

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1. Left suprahepatic space :

Which separates the diaphragm from the left lobe of the liver, the fundus of the stomach, and the spleen, and which is bounded medially by the falciform ligament and posteriorly by the left triangular ligament.

2. The left leteral space :

Which extends between the diaphragm and the spleen and inwards between the spleen and the left kidney.

3. The left anterior intrahepatic space:

Between the left lobe of the liver above and infront of the stomach and lesser omentum, behind it is in free communication anteriorly around the lower margin of the left lobe of the liver with the left suprahepatic space .

d. The left subhepatic space :

The omental bursa, or the lesser sac, will be discussed later .

All intraperitoneal spaces except the lesser sac are communicate with each other, below and on either sides of

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the falciform ligament this makes possible the spread of infection from one space to the other especially between the suprahepatic and infrahepatic compartments[Gray's anatomy 1980].

The extraperitoneal spaces :

Can be roughly defined as perinephric spaces. The right extraperitoneal space is bounded by the coronary ligament, falciform ligament and right triangular ligament

The left extraperitoneal space is formed by the extraperitoneal connective tissue around the suprarenal gland and upper pole of the left kidney. [Gray's 1980].

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