

4 Thu'l-qa'da 1442 H

14/6/2021

٤ ذو القعدة ١٤٤٢ هـ

8:00

Liver

9:00

* it is the largest gland in the body
 * 1/50 of body weight in adult

10:00

* 1/20 " in infant
 (because there is more activity in infant)

11:00

* Liver is a mixed gland → exocrine → bile

12:00

→ endocrine → Fibrinogen/Prothrombine/Albumen

* Exocrine needs ducts 5000

1:00

2:00 Rt hepatic duct ⊕ Lt hepatic duct = Common hepatic duct
 Common hepatic duct ⊕ cystic duct = Common bile duct

3:00

* Common bile duct opens into the 2nd Part of duodenum

4:00

* Endocrine → ductless → directly to the blood

5:00

* ثمن الكبد كافي للقيام بوظائف الجسم بس المشكلة إذا
 صار فيه مزمن رح ينتشر بنسيج الكبد كامل

6:00

* Functions of the liver:

7:00

- Exocrine secretion of bile & bile salt → For fat digestion

- Metabolism of carbs, fat and protein

8:00

- Formation of heparin & anticoagulant substances

Notes: "الهبارين" مبيع للدم في اللي يصير عنده جاذبة بطور مؤقتة

وهو يتصنع بشكل طبيعي بال liver

وكمثال Liver له دور في إنتاج ال coagulant material

مثل ال Fibrinogen في اذا واحد صار عنده Injury

خلال دقائق يصير clotting للجرح عشان ما ينزف

8:00 - Detoxication

تكملة

ال detoxication يمسر إما بال liver أو بال kidney
 فمثلاً إذا المريض كان عنده مرض بالكبد فبدلاً ما يعطونه
 Morphine (لأنه يخفف الألم) يعطونه دواء ثاني بجسده
 detoxication بال kidney لأنه detoxication للمorphine بالكبد
 والكبد فيه مشكلة.

11:00 - Storage of glycogen & vitamins

- activation of Vitamin D

12:00 * Portal Vein يعمل ال absorptive material

1:00

ويوجد بها Liver.

2:00 * Falciiform ligament يفصل بين ال right & left lobes of the liver
 وال attachment مع ال diaphragm وال anterior abdominal wall

3:00 Location

right lobe → right hypochondrium

4:00 left lobe → epigastrium & extends to left hypochon

Surface anatomy → 5 surfaces (Sup/Inf/Ant/Post/Right)

5:00

inferior & posterior surfaces → Visceral surface

6:00

لأنه ال viscera يكون على impression عليه

ز ي ال Rt Kidney / Rt suprarenal / transverse colon / duodenum / esophagus / stomach / gallbladder

7:00

8:00 * upper border of the liver → 5th rib

5th intercostal space ملاحظات

فبدفع الصجان الحاجز للأعلى عشان هيا

→ right copula is higher than the left copula
 of the diaphragm.

15 Thu'l-qa'da 1442 H

25/6/2021

١٥ ذوالقعدة ١٤٤٢ هـ

8:00

* *diaphragm* فوق الـ *liver* وعالج *dome-shaped*
 فيفطى *superior surface* & *Part of Ant and Post & right surface*

9:00

Visceral Surface

← ما يفطى الـ

upper border → 5th rib or intercostal

10:00

lower border → below the right 9th rib

SATURDAY

26

السبت

16 Thu'l-qa'da 1442 H

26/6/2021

١٦ ذوالقعدة ١٤٤٢ هـ

* إذا ابتغى المريض بوجع في البطن قد يكون ذلك من *hepatomegaly* (lower border)
 تحت الـ *right 9th rib* خاصة حالة الـ

9:00

* *diaphragm* يفصل الـ *Lung & heart* (thoracic cavity) عن الـ *Liver* (abdominal cavity)

10:00

of → *Ant. View of the liver*

11:00

Falciform ligament من الأسفل يوجد *round ligament of the liver*

12:00

→ obliterated umbilical vein

* *round ligament of the liver* = *Ligamentum teres*

1:00

Coronary Ligament ← *superiorly* الـ

2:00

Between *bare area* الـ
 the *coronary ligament*

3:00

* *Falciform ligament* separates Rt & Lt lobes of the liver

4:00

* *Fundus* of the gallbladder extends below

5:00

the lower border of the liver (can be seen from
 anterior view).

17 Thu'l-qa'da 1442 H

27/6/2021

١٧ ذو القعدة ١٤٤٢ هـ

* 8:00 Postero-infero surface = Visceral surface

the attachment between ← معلومة جانبية

9:00 the liver & diaphragm by coronary ligament of the liver

10:00 Superiorly ← عيني الـ Coronary lig. موجه

11:00 Relations :-

Porta hepatis → مكان دخول الأوعية الدموية وخروج الـ bile duct

12:00 right lobe → impressions for right Kidney
1:00 right suprarenal gland
right colic Flexure
2:00 gallbladder & IVC
bare area
3:00 quadrate lobe
4:00 caudate lobe
Duodenal impression

Left lobe → impressions for stomach
5:00 esophagus

6:00 * وأرجع للمصورة وأعرف حدود كل استي عليها دايماً
بجني عليه سؤال عملت

7:00 Portal Vein
* Porta hepatis → hepatic artery
8:00 common bile duct

NOOO hepatic vein

ملاحظات

وتحطت الـ
Ligamentum Venosum → ductus venosum كان اسمها
obliteration left branch Portal Vein IVC duct تواج

14 Shawwal 1442 H

26/5/2021

١٤ شوال ١٤٤٢ هـ

8:00 * Between Ligamentum Venosum & IVC = Caudate lobe ←

9:00 * Between gallbladder & round ligament of the liver = Quadrangle lobe

10:00

* Round lig - of the liver = Lig. Teres

11:00

* Caudate & Quadrangle lobes → Anatomically → Right Lobe of the liver
 → Functionally → Left Lobe

12:00

1:00

How?

2:00

Porta hepatis ال باب الكبدي
 Left و Right ينقسم الى
 ال Hepatic artery

3:00

4:00 Left lobe ⊕ Caudate & Quadrangle ← Left hepatic artery

5:00

right lobe و right hepatic artery

6:00

7:00

وكمكان ال bile ال التي يتم تصنيعه في

8:00

right hepatic duct و right lobe ←

Notes

Left hepatic duct و Caudate ⊕ Left lobe & Quadrangle ←

Left Lobe ← Functionally ← Caudate & Quadrangle

15 Shawwal 1442 H

27/5/2021

١٥ شوال ١٤٤٢ هـ

8:00 Lig. Teres → obliterated umbilical veinLeft branch of portal vein
9:00 * كان يالامبريو بين ال umbilicus و10:00 Ligament و يتحول إلى obliteration
Round lig. of the liver أو Lig. Teres و بحير اسمه11:00 * Tubular omentum → بالامبريو يدلنا على
12:00 lesser omentum دابة تكوين ال1:00 * Connection between the two coronary ligaments
2:00 = triangular ligament3:00 Sup. Surface of the liver
Coronary ligaments يكون جاي بين ال

4:00 Ant. ال

Post.

5:00 Lips

6:00 التقاء هذول ال Lips على

7:00 right triangular ligament ← right side
Left triangular ligament ← Left side

8:00

ملاحظات

Coronary ligaments و مكان ال bare area يكون بين ال

26 Shawwal 1442 H

7/6/2021

٢٦ شوال ١٤٤٢ هـ

8:00 * Superior relation to the liver is the diaphragm (which separates the liver from Pleura & lung, Pericardium of heart)

9:00

* Anterior relations → Diaphragm / Xiphoid Process / costal cartilage (7-8-9) / Ant. abdominal wall / Rt & Lt Pleura & lung / left hypochondrium

10:00

11:00

12:00

* Common bile duct opens into the 2nd part of duodenum

1:00

2:00

3:00

4:00

5:00

6:00

7:00

8:00

Notes

* tail of Pancreas

يفعل impression على

visceral surface of Spleen

Superior mesenteric vein

Spleen vein behind the neck of pancreas

Portal Vein

علاقته

* celiac trunk

Spleen Vein

Posterior surface of Pancreas

Spleen tortuous artery upper border of Pancreas

27 Shawwal 1442 H

8/6/2021

٢٧ شوال ١٤٤٢ هـ

8:00 Post. relations of the liver → تكامله وحواله
Visceral surface

9:00 Lobes of the liver → Rt lobe
→ Lt lobe

10:00 → caudate lobe (between IVC and ligamentum venosum)

11:00 → Quadrate lobe (between gallbladder and ligamentum teres)

12:00 → round lig. of the liver

1:00 * Caudate & Quadrate lobes - Functionally →
→ follows the left lobe ←

* Liver is separated by Four Planes :- 2 vertical 2 horizontal
3:00 → Vertical → groove for IVC & gallbladder
4:00 → Fissure for lig. venosum & round ligament

5:00 → horizontal → above porta hepatis
below //

6:00 * Falciform lig → between Rt & Lt lobes of the liver

7:00 * Caudate lobe → between ligamentum venosum & IVC
→ above porta hepatis

8:00 → has two processes → 1) C-Process
→ 2) Papillary Process ملاحظات

above
Porta hepatis

MONDAY

4

الاثنين

27 Safar 1443 H

4/10/2021

على يمينها

٢٧ صفر ١٤٤٣ هـ

8:00

* Quadrate lobe → between gallbladder & lig. teres
→ below Porta hepatis

9:00

→ Anteriorly → Ant. margin of the liver

10:00

* ال Gallbladder من جهة مخاطبة بـ Peritoneum ومن جهة ثانية يتكون depressed in the liver وهاد الـ الاسي مفيد للتروية

11:00

الدموية الها. ← يعني الها direct blood supply وبالتالي هاد بضع ليهير

12:00

~~gangrene of gallbladder~~

1:00

* Porta hepatis = hilum of the liver

2:00

→ lies between caudate & quadrate lobes

3:00

portal vein و hepatic artery ← يدخل فيها

4:00

cystic vein of gallbladder

right branch

5:00

بروح للـ portal vein

عن طريق الـ cystic artery

6:00

common bile duct ← يطلع منها

7:00

Lymph nodes / Fat وفيها كمان

8:00

Notes

28 Safar 1443 H

5/10/2021

٢٨ صفر ١٤٤٣ هـ

8:00 Peritoneum of the liver

* The liver is covered by peritoneum
(So it is intraperitoneal organ)

9:00 except at bare area

10:00 Ligaments of the liver

1) Falciform lig... Separates Rt & Lt lobes

11:00

attached to anterior abdominal wall & diaphragm

12:00 2) Lig... teres Obliterated umbilical vein

3) coronary lig... Surrounding the bare area
(or superior area)

1:00

4) Rt triangular lig...

2:00

5) Lt

نابج عن البقايا ال
of coronary lig...

3:00

6) Hepatogastric lig

Lesser

7) Hepatoduodenal lig

Omentum

4:00

8) Lig. Venosum → obliterated ductus
Venosum

5:00

6:00

* معلومات إضافية عنهم :-

* Falciform lig → Sickie Shaped / round
Lig - Lig teres

7:00

8:00 * bare area → dull

ملاحظة لانها
not covered by Peritoneum

* Lig. Venosum → attached to the left branch
of Portal Vein & IVC / * umbilical vein → Lig teres
Left branch of Portal Vein

FRIDAY

15

الجمعة

9 Rabia-1 1443 H

15/10/2021

٩ ربيع الأول ١٤٤٣ هـ

8:00

Histology of the liver

9:00

* Liver is covered by glisson capsule

لـ يقسم الـ Liver إلى Lobes & Lobules

10:00

hexagonal lobules

SATURDAY

16

السبت

10 Rabia-1 1443 H

16/10/2021

١٠ ربيع الأول ١٤٤٣ هـ

8:00

* Central vein is located centrally in the hexagonal lobule.

9:00

* hepatocytes have radial appearance

(من الأطراف حتى تصل الـ central vein)

10:00

* hepatocytes الـ hepatocytes يصنع الـ bile وهذا الـ bile يتم تخزينه بـ bile canaliculi

11:00

12:00

قنوات لتجمع العصارة الصفراوية

1:00

* على الجانب الآخر من الـ hepatocyte يوجد blood sinusoids (جيوب دموية يتجمع فيها الدم الجاي من الـ portal & hepatic vein & artery)

2:00

3:00

يعني فيها oxygenated blood + non-oxygenated blood + absorptive material

4:00

5:00

بالتالي فاي الـ sinusoids هي التي بتعطي hepatocyte المواد مشان تقوم بوظيفتها

11 Rabia-1 1443 H

17/10/2021

١١ ربيع الأول ١٤٤٣ هـ

* in each angle of the hexagonal lobule there is "Portal triad" → Portal vein

9:00

→ hepatic artery

10:00

→ common bile duct

* Central vein collects → waste products & CO₂

12:00

after the functioning of hepatocyte

1:00

→ central vein then hepatic vein then IVC

2:00

to the right atrium

3:00

Segmental anatomy of the liver.

4:00

* IVC has 3 openings (for hepatic veins)

So there is 3 hepatic veins

5:00

R + lobe

← واحد من

L + lobe

← " " ←

6:00

caudate & Quadrate lobes " " ←

7:00

* Liver contains 8 segments

I / II / III / IVa IVb / V / VI / VII / VIII

8:00

ملاحظات

Segment → hepatic transplantation or donation (بم التبرع)

↳ because each segment has its own blood supply
Lymphatic drainage, nerve supply

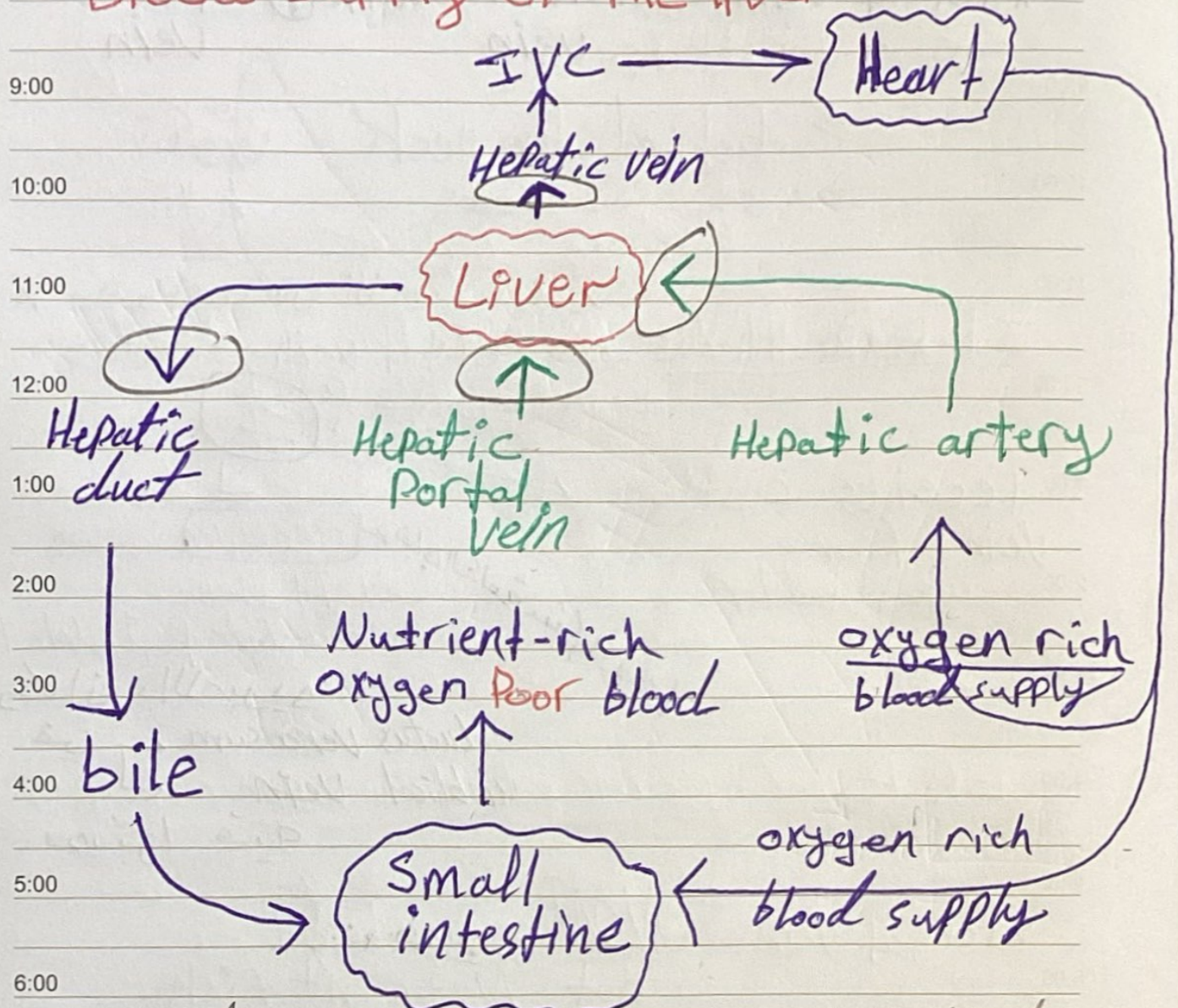
قبل التبرع بفعل فحوصات حتى
فحص الـ rejection

29 Safar 1443 H

6/10/2021

٢٩ صفر ١٤٤٣ هـ

8:00 Blood supply of the liver



7:00 * Hepatic artery 20% - 25% of the blood entering the liver
 * Portal vein 75% - 80% of the blood entering the liver

8:00

Notes * Hepatic artery → Oxygenated blood
 → branch from celiac trunk
 → RT & LT divisions in Porta hepatis

RT lobe
 cystic branch goes to the LT lobe & caudate, Quadrate lobes

1 Rabi'a-1 1443 H

7/10/2021

١ ربيع الأول ١٤٤٣ هـ

8:00 * Portal Vein = Superior mesenteric ⊕ Splenic Vein

9:00 behind the neck
10:00 of Pancreas

11:00 * وهو من نفس الشئ ←
In Porta hepatis → Portal vein divides

12:00 into R+ & L+

1:00 receives cystic
Vein from
2:00 gall bladder

← received from
→ left lobe
→ caudate & Quadrate lobes
وكان بالامبريو

3:00 ductus venosum ← في
4:00 umbilical vein ←
بجانبه فيه

5:00 * Portal Vein → NON oxygenated
6:00 but Nutrient rich

7:00 blood sinusoids ← بينها بال Portal Vein *
between hepatocytes hepatic artery

8:00

ملاحظات

* ال bile يتجمع في ال bile canaliculi

2nd Part of --- common bile duct ---

7 Rabia-1 1443 H

13/10/2021

٧ ربيع الأول ١٤٤٣ هـ

8:00 Calot's triangle → Cholecystectomy
بقيدنا أثناء إزالة
of gallbladder

9:00

10:00

11:00

12:00

1:00

2:00

3:00

4:00

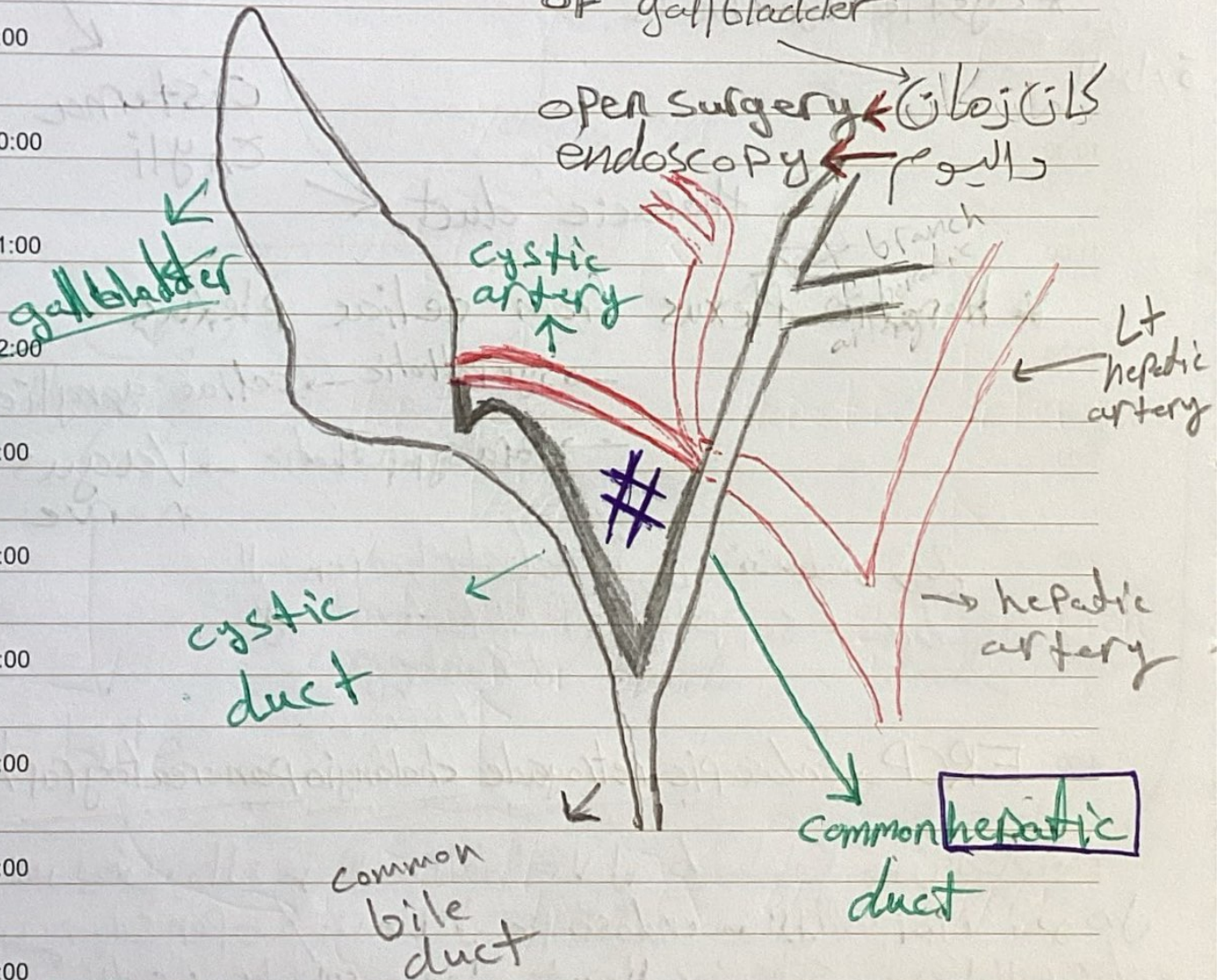
5:00

6:00

7:00

8:00

Notes



→ Calot's triangle

تعمل cut ← Cystic artery
" ← duct

بتركه مثل ما هو ← Common hepatic duct

8 Rabia-1 1443 H

14/10/2021

٨ ربيع الأول ١٤٤٣ هـ

من الكبد

8:00

* Hepatic lymph nodes → celiac lymph nodes

9:00

* Cystic lymph nodes

من المرارة

10:00

Cisterna
Chyli

thoracic duct ←

11:00

* Hepatic Plexus from celiac plexus

12:00

→ sympathetic → celiac ganglia

1:00

← Parasympathetic → Vagus
nerve

2:00

ال distribution يكون بنفسا توزيع
blood supply of celiac ال
trunk

3:00

4:00

ERCP → Endoscopic retrograde cholangiopancreatography

5:00

* المريض يدخل من المستشفى خلال ٦ ساعات دون الحاجة
إلى open surgery / يدخل ال endoscope من ال oral cavity ويوصل
إلى sphincter of Oddi ويجعل cut ال sphincter ويدخل ال endoscope
retrogradely إما بال pancreatic duct أو ال common bile duct

6:00

في حال ال Stones سهل انك تمشيها وتركها
بال duodenum وتروجها ال stool وإذا كان

7:00

في mud حامل obstruction ال Jaundice
ملاحظات: يجعل irrigation فيدخل المسكنة
of saline

8:00

* نوعي ال tube ← Fiberoptic tube

Liver cirrhosis → most common cause is alcohol

Liver Fibrosis → can be caused by schistosomiasis

29 Jumada-1 1442 H

13/1/2021

٢٩ جمادى الأولى ١٤٤٢ هـ

8:00

GALLBLADDER

9:00 * Consists of Fundus, body, neck and downward bulge called Hartmann's Pouch

10:00

* تبدأ الـ cystic duct عند الـ neck وتلتقي مع common hepatic duct لتعمل common bile duct

11:00

12:00 * Hartmann's Pouch → secretions يتم جمع فيه الـ secretions
مرات بحسبها ترسبات ويكون nucleus وحولها
تتكون (Single Stone) ← ناتجة من Stasis of secretions

2:00

3:00 * Cystic duct → 4 cm
* Sphincter of Oddi → normally closed, opens only in response to a meal
ففي شأن هيك يتم جمع إفرازات الكبد ← هي أملا diluted

4:00

5:00 ويتم رجوع الـ cystic duct ويصير absorption of water

5:00

6:00 يعني الـ bile concentrated يتمسك بـ fatty meal
عشان هيك لما الواحد يأكل Fatty meal
يتم رجوع الـ bile relaxed relaxation of sphincter

6:00

7:00 contraction of gallbladder

7:00

8:00 ويتم إفراز 1 ml من الـ gallbladder

8:00

Notes

1 ml of gallbladder ≈ 20 L of liver

عشان هيك الناس اللي رجعو cholecystectomy اكلوا Fat
يصبو عندهم complications منها diarrhea لأنه بيسر إفراز هائل من الكبد

- 8:00 gall bladder → right hypochondriac region
 → covered by Peritoneum (Serosa) embedded in the liver جرس مغطى جزئياً
 9:00
 10:00 → gangrene ما يحبس فيها
 → single stone in Hartmann's Pouch
 11:00 common bile duct لا يمكن تطلع لا
 Sundice
 12:00 Histology of gallbladder
 ↳ mucosa
 ↳ submucosa
 ↳ muscularis externa
 ↳ adventitia or Serosa gallbladder
 1:00
 2:00
 3:00 other parts anterior surface
 4:00 * mucosa of gallbladder has abundant folding (honey comb appearance)
 5:00
 6:00 * Simple columnar without goblet cells ((نوع) د epithelium)
 7:00 * Submucosa of gallbladder is NOT well-defined (unlike other parts of GIT)
 8:00
 * muscularis externa of gallbladder is NOT longitudinal or circular but in different direction
 * Secretion of mucus بعض الخلايا ممكن يفرز

FRIDAY

29

الجمعة

16 Jumada-2 1442 H

29/1/2021

١٦ جمادى الآخرة ١٤٤٢ هـ

* Cystic duct → 4 cm / Common bile duct → 10 cm

* Common bile duct consists of Three Parts

9:00 1) Supra duodenal Part

2) Retro

10:00

3) Retro Pancreatic Part (تحديدًا خلف الـ Head of Pancreas السبت)

SATURDAY

30

17 Jumada-2 1442 H

30/1/2021

١٧ جمادى الآخرة ١٤٤٢ هـ

8:00 blood supply of GB

- Cystic artery → branch of Rt hepatic artery

9:00 - Cystic Vein → ends in Portal Vein

10:00 Lymphatic drainage of GB

cystic nodes then hepatic nodes then celiac nodes

11:00

neck of GB عند الـ

حول الـ Celiac trunk

12:00

nerve supply → Sympathetic → celiac ganglion
→ Parasympathetic → vagus nerve

1:00

يعملوا مع بعض Plexus

2:00

Hormone → Cholecystokini → duodenum

3:00

contraction of GB بعد

4:00

Sphincter of Oddi * بال ERCP يدخل من عند

* Ampulla of Vater (Hepaticopancreatic ampulla)

5:00

→ Small opening on the medial side of duodenum for common bile duct & Pancreatic duct

18 Jumada-2 1442 H

31/1/2021

١٨ جمادى الآخرة ١٤٤٢ هـ

8:00

~~Biliary bladder~~

9:00

Blood supply of Common Bile Duct (CBD)

→ Small arteries arises from Cystic artery and Posterior branch of Superior Pancreatoduodenal artery

10:00

11:00

which is a branch of

Superior mesenteric artery

12:00

Venous drainage Vagus و

1:00

Bile

→ composed of organic molecules including cholesterol, phospholipids, bilirubin

2:00

→ Gallstones are mostly cholesterol

3:00

obstruction of (CBD) حصى الكلى في CBD

4:00

Large stones ← Small Stones

5:00

لأنها يمكن تطلع على CBD

6:00

* Cholelithiasis = Stones in the GB

* gangrene of GB is rare

7:00

Gallbladder diseases

8:00

① cholelithiasis & cholecystitis

② Obstructive jaundice

③

gangrene of GB is rare ① ملاحظات ② خاصة إذا سكر ال CBD

④ Congenital defects

8:00

PANCREAS

9:00 * extends from hilum of spleen on left side (tail) to concavity of duodenum on right side (head)

10:00 * consists of head/neck/body/tail

* neck of Pancreas → Portal vein يتكون خلفها ال

11:00 * head of Pancreas → has a Process called "Uncinate Process"

12:00 Superior mesenteric vessels ألام الuncinate Process يوجد

1:00

يعني الuncinate Process متخية وراهم
2:00 * Pancreas is a mixed gland (liver رزي آل)
* exocrine of Pancreas is made up of acini (رزي آل parotid كانت acini)
3:00 ← يفرز الإنزيمات ال Pancreatic duct وبتفتح على

4:00

2nd Part of duodenum
* وكمان البنكرياس عنده accessory Pancreatic duct وبتفتح فوق ال Main duct بواحد انش

5:00

6:00 * ألام ال endocrine فهي ال islets of langerhans وفيها أربعة أنواع من الخلايا Alpha/Beta/Gamma/Delta

7:00

* Pancreas is a retroperitoneal organ
Posterior abdominal wall نائم على

8:00

* extends from epigastrium to the left hypochondrium

Notes

* Pancreas → retroperitoneal organ ✓

8 Jumada-2 1442 H

21/1/2021

٨ جمادى الآخرة ١٤٤٢ هـ

8:00 Relations of pancreas

* Behind the Stomach directly there is Lesser Sac
 9:00 then Pancreas then left Kidney and left Suprarenal.

10:00 * on upper of pancreas there is Splenic artery

11:00 * Transverse colon and mesocolon are anterior to the Pancreas

12:00 أولاً
 anterior surface بال of pancreas

1:00 * Bile duct } → Post. to the head of Pancreas
 2:00 * Portal vein } → " " " " (body) " "

* Splenic vein → " " " " (body) " "

3:00 * IVC →

* Aorta →

4:00 * origin of superior mesenteric →

5:00 * Left Psoas is also Posterior to Pancreas

6:00 Visceral surface من impression for Pancreas *
of spleen

7:00 * Bile duct is Posterior to the head
 8:00 of Pancreas → head من 2nd part of duodenum
ملاحظات عشان تفتح في

* (neck) of pancreas يتكون عند ال Portal vein
 * Superior mesenteric + splenic vein = Portal vein

9 Jumada-2 1442 H

22/1/2021

٩ جمادى الآخرة ١٤٤٢ هـ

8:00 * splenic artery → upper border of Pancreas
 * " Vein → Posterior surface " "

9:00

10:00 splenic vein يذهب في الـ inferior mesenteric vein *

SATURDAY

23

السبت

10 Jumada-2 1442 H

23/1/2021

١٠ جمادى الآخرة ١٤٤٢ هـ

8:00 * Pancreatic acini secretes enzymes

9:00 * B cells of islets of Langerhans } through بترشح
 secrete Insulin. the Pancreatic
 10:00 duct

* A cells -----

11:00 → Glucagon.

* normal level of glucose in blood → 70 - 110

12:00 * Type 1 diabetes → autoimmune against
 B cells → no insulin production → so high
 1:00 levels of
 glucose in blood

2:00 * Superior mesenteric vessels → anterior to
 the head of Pancreas

3:00 → lies within the concavity of duodenum
 → disc shaped

4:00 * The body of Pancreas is somewhat triangular
 in cross section (3 borders / 3 surfaces)

5:00 * anterior border → attached to mesocolon

* Superior border → splenic artery

* Posterior surface → " Vein

11 Jumada-2 1442 H

24/1/2021

١١ جمادى الآخرة ١٤٤٢ هـ

8:00 anterior surface of pancreas ——— جاي عند ال Lesser Sac *

9:00

* inferior surface → related to the greater omentum

10:00

11:00 * Tuber omental → where the ant. surface join the neck
→ related to lesser omentum

12:00

* Posterior surface of pancreas
→ devoid of peritoneum
→ in contact with

1:00

2:00 → aorta / splenic vein / left kidney / left suprarenal / origin of superior mesenteric artery / and the left crus of diaphragm

3:00

4:00 upper border * tortuous يكون و جاي على ال splenic artery *

5:00 * above the upper border → celiac trunk
✓ splenic و تقرباته

6:00

✓ hepatic
✓ left gastric

7:00

* anterior border → attached to transverse mesocolon

8:00

Two layers و بقية ال ملاحظات
upward و حدة
downward و حدة

* inferior border → superior mesenteric vessels emerge under its right extremity

5 Jumada-2 1442 H

18/1/2021

ه جمادى الآخرة ١٤٤٢ هـ

8:00

* كل اللي حكينا عنه بصفتها 23 هو لا Body

9:00

→ 3 borders / 3 surfaces

10:00

* The tail of Pancreas → is found in content of Splenicorenal

11:00

يعني يكون	}	ligament (Lienorenal
in contact with		ligament) with
hilum of		splenic vessels
Spleen		

12:00

1:00

* Spleen is a lymphatic tissue & rich in blood.

2:00

* أي Fracture في 9th/10th/11th ribs
 ممكن يعمل rupture لا spleen
 ويهبر bleeding

3:00

4:00

* وكمان اذا اتعمل stitches لا spleen
 برهتو بهبر bleeding

5:00

Splenectomy فلاك الحل بانه نفعل

6:00

كيف ؟ ؟ ؟

7:00

← بيتجى نفكح ال Lienorenal lig. وبنفعل
 Ligation ل Splenic vessels وبنفكحهم

8:00

ولا لازم ندير بالناحى ال tail of Pancreas
 لانها اي truma بال tail ممكن تطلع Secretion
 ونفعل Peritonitis

Notes

8:00 * Pancreatic ducts → main } open into
 → accessory } 2nd part
 of duodenum

9:00

* Blood supply of pancreas

10:00 → Celiac trunk → Splenic artery → Ant.

+ Post. Pancreatic branches (on upper border

11:00 of pancreas) supp inf Pancreaticoduodenal arteries وكما نفي

* Splenic artery also gives 5-6 branches

12:00 in hilum of spleen (for spleen)

1:00

وعكسها لا Vein

→ Splenic vein (on post. surface of ^{the} body of

2:00 pancreas) joins with superior mesenteric

vein at the level of the neck of pancreas

3:00 to give "Portal vein"

4:00 * left gastroepiploic vein & short gastric

veins drain into the splenic vein

5:00

* Pancreaticosplenic nodes → gastric nodes

or pyloric nodes ~~and~~ hepatic nodes

→ Celiac nodes then to "cysterna chyli"

then to thoracic duct

8:00

Sympathetic from celiac ganglia

Vagus nerve

ملاحظات

8:00 Congenital defects or anomalies of Pancreas

9:00 1) Annular Pancreas → البنكرياس يلتف حول الـ duodenum ويسبب انسداد و obstruction

10:00 *The normal position of Pancreas is next to و but not surrounding the duodenum

11:00 2) Ectopic Pancreas
Pancreatic tissue outside its normal location

12:00 Clinical Notes

1:00 head of Pancreas إذا صار في الـ tumor -
انسداد في الـ C/PD ويسبب انسداد و obstructive
2:00 Jaundice

3:00 body of Pancreas إذا صار tumor -
انسداد في الـ Portal vein & IVC و pressure على الـ
4:00

5:00 -stasis of secretion can cause acute
Pancreatitis

6:00

7:00

8:00

Notes

8:00

Spleen

relations ما له بال GIT ولكنه موجود بال abdomen والـ

9:00

* Spleen

Two surfaces

Visceral

Diaphragmatic or costal

10:00

Two ends

upper (medial)

(9th 10th 11th)

Lower (lateral)

11:00

Two borders

upper (anterior)

Lower (posterior)

12:00

* Spleen

Left hypochondrium

related to (9th 10th 11th) left costal cartilages

Long

* axis of spleen

Parallel to 10th left rib

* أي واحد جعل حادث سيارة وكان في كسر بالأضلاع بال ٩ ١٠ ١١
اليسرى) لزوم تدخله فانه أب ruptured spleen

3:00

urgent operation

* Spleen is completely covered by peritoneum

4:00

except the hilum of spleen (which is a

slit-like structure) * so spleen is an intraperitoneal organ except at the hilum

6:00

Two ligaments:

① gastrosplenic omentum (ligament)

7:00

* between spleen & greater curvature of stomach

8:00

② splenicorenal ligament

other name = lienorenal ligament

* attached to the hilum of spleen

* between spleen & kidney

ملاحظات

FRIDAY

1

الجمعة

17 Jumada-1 1442 H

1/1/2021

١٧ جمادى الأولى ١٤٤٢ هـ

8:00 Size of the spleen → 1 inch thick
 → 3 1/2 broad
 9:00 → 5 1/2 long

10:00 Weight " " " → 7 ounce

SATURDAY

2

السبت

18 Jumada-1 1442 H

2/1/2021

١٨ جمادى الأولى ١٤٤٢ هـ

8:00 notch على upper surface ال
From lobule جاي Spleen تكوين ال

9:00

* Diaphragm separates spleen (abdominal organ)
 10:00 From left Pleura and lung (thoracic organ)

11:00 Spleen Impression الى Viscera سء ايض ال
 → Stomach (above the hilum)
 12:00 → left Kidney (below the hilum)
 → left cholic flexure or splenic
 1:00 Flexure (at the inferior angle)
 → tail of Pancreas (below or close
 2:00 to the hilum)

3:00 * splenic artery → Spleen الى لها 5-6 بيغطي
 4:00 branches

5:00

← بالنهاية روح Porta ال
 Vein

19 Jumada-1 1442 H

3/1/2021

١٩ جمادى الأولى ١٤٤٢ هـ

8:00 Hilum of spleen → Splenic artery
Vein

9:00

tail of Pancreas

10:00

Content of the hilum
Lienorenal lig. و رباط Lienorenal
Impression below the hilum و رباط

11:00

12:00

Borders of the spleen → Sup. → Sharp & Notched
→ Inf. → rounded / left Kidney
جای تصدع

1:00

2:00

Ends of the spleen → Medial → Superior & Back

3:00

→ Lateral → lateral

→ 4cm away

4:00

→ in the left mid axillary line

From mid (sagittal) line Posteriorly

5:00

Lymphatic drainage of the spleen

6:00

Pancreaticosplenic nodes

7:00

8:00

Celiac nodes و آخر اشي بروح لا

ملاحظات

