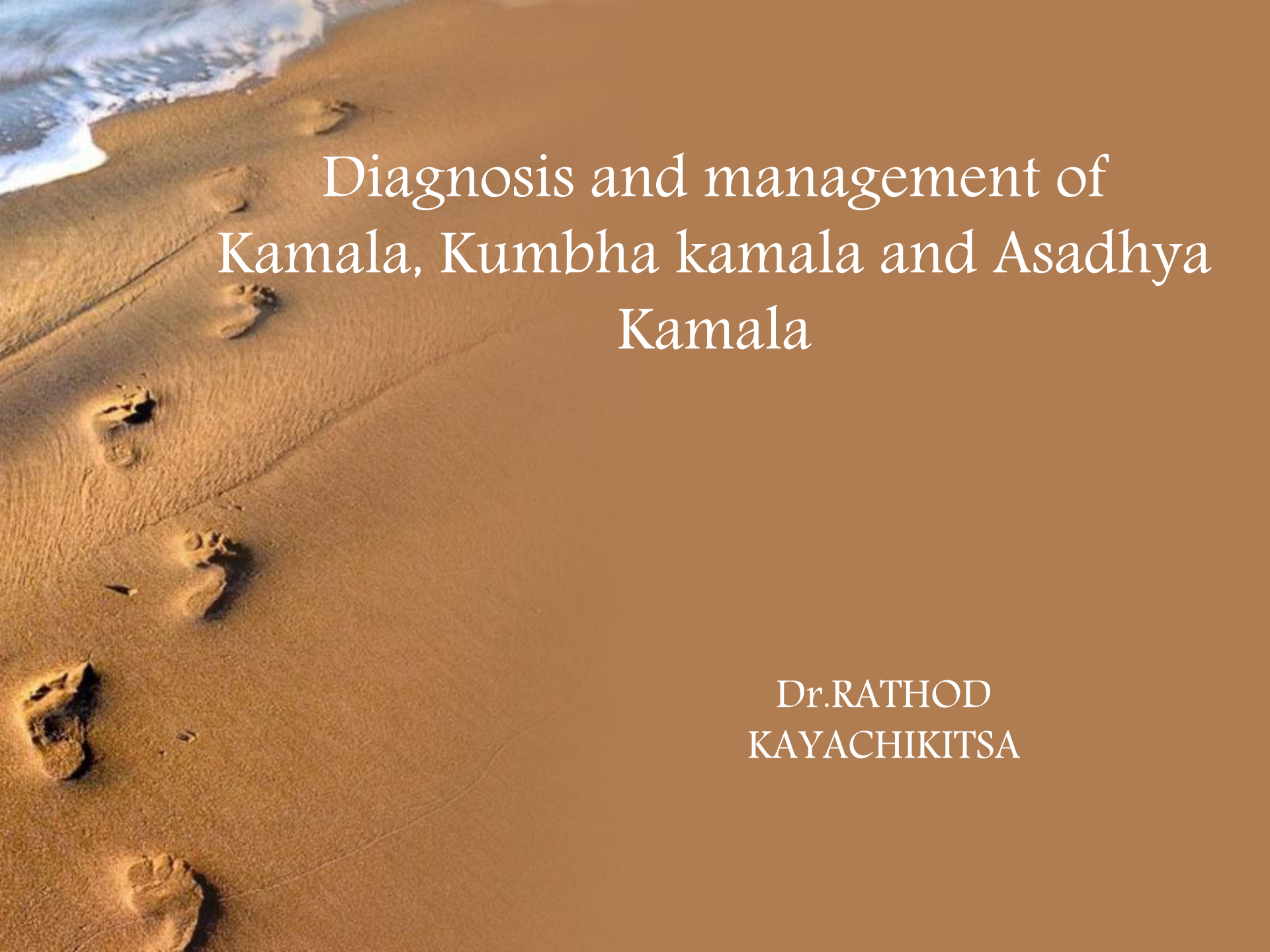

Welcome



# Diagnosis and management of Kamala, Kumbha kamala and Asadhya Kamala

Dr.RATHOD
KAYACHIKITSA

# Disorders of Liver

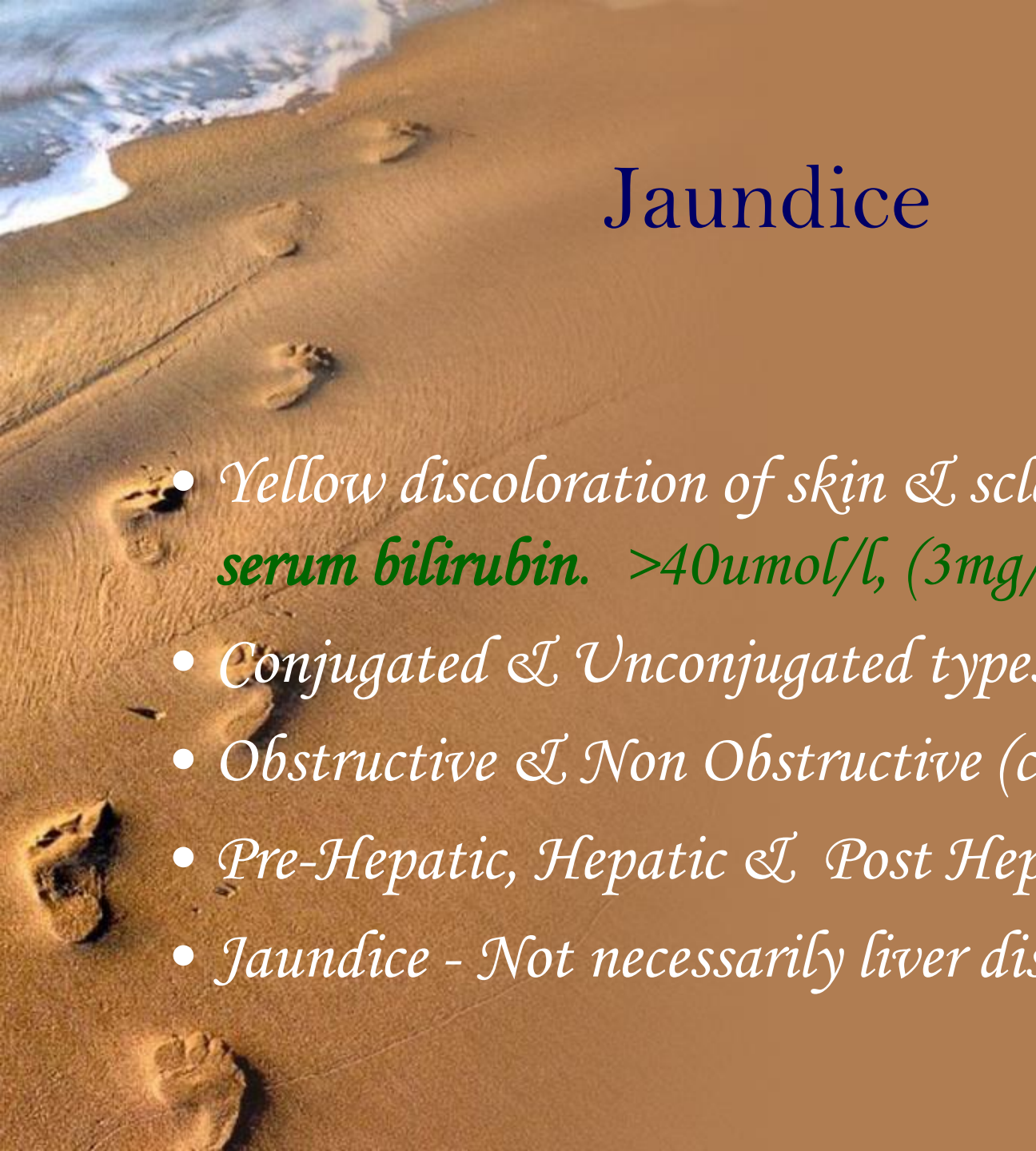
- *Acute Liver Disorder:*
  - *Viral, Drug, Gall stones, alcohol toxicity.*
- *Chronic Liver Disease:*
  - *Chronic hepatitis, Cirrhosis, viral, alcohol, congenital*
  - *Autoimmune hepatitis.*
- *Congenital Disorders:*
  - *Haemochromatosis, Wilsons.*
- *Tumors:*
  - *Benign: Adenoma, angioma, Nodular hyperplasia*
  - *Malignant: Hepatocellular carcinoma, Cholangiocarcinoma, Hepatoblastoma, Angiosarcoma.*
- *Cysts: Simple, Hydatid*

# Clinical features & Pathogenesis

| | |
|---|---|
| *Jaundice* | *Impaired conjugation or obstruction.* |
| *Dark urine* | *Conjugated hyperbilirubin* |
| *Pale stools* | *Biliary obstruction* |
| *Oedema* | *Low albumin – low oncotic pressure.* |
| *Steatorrhoea* | *Bile obstruction.* |
| *Pruritis* | *Bile obstruction → Bile salt in blood.* |
| *Ascitis* | *Portal hypertension , low albumin, hyper aldosterone* |
| *Bleeding* | *Coagulation factor synthesis* |
| *Haematemesis* | *Oesophageal varices. (hemorrhoids)* |
| *Encephalopathy* | *Toxic nitrogen products – gut bacteria.* |
| *Foetar hepaticus* | *Musty odor (mercaptans by gut bacteria)* |

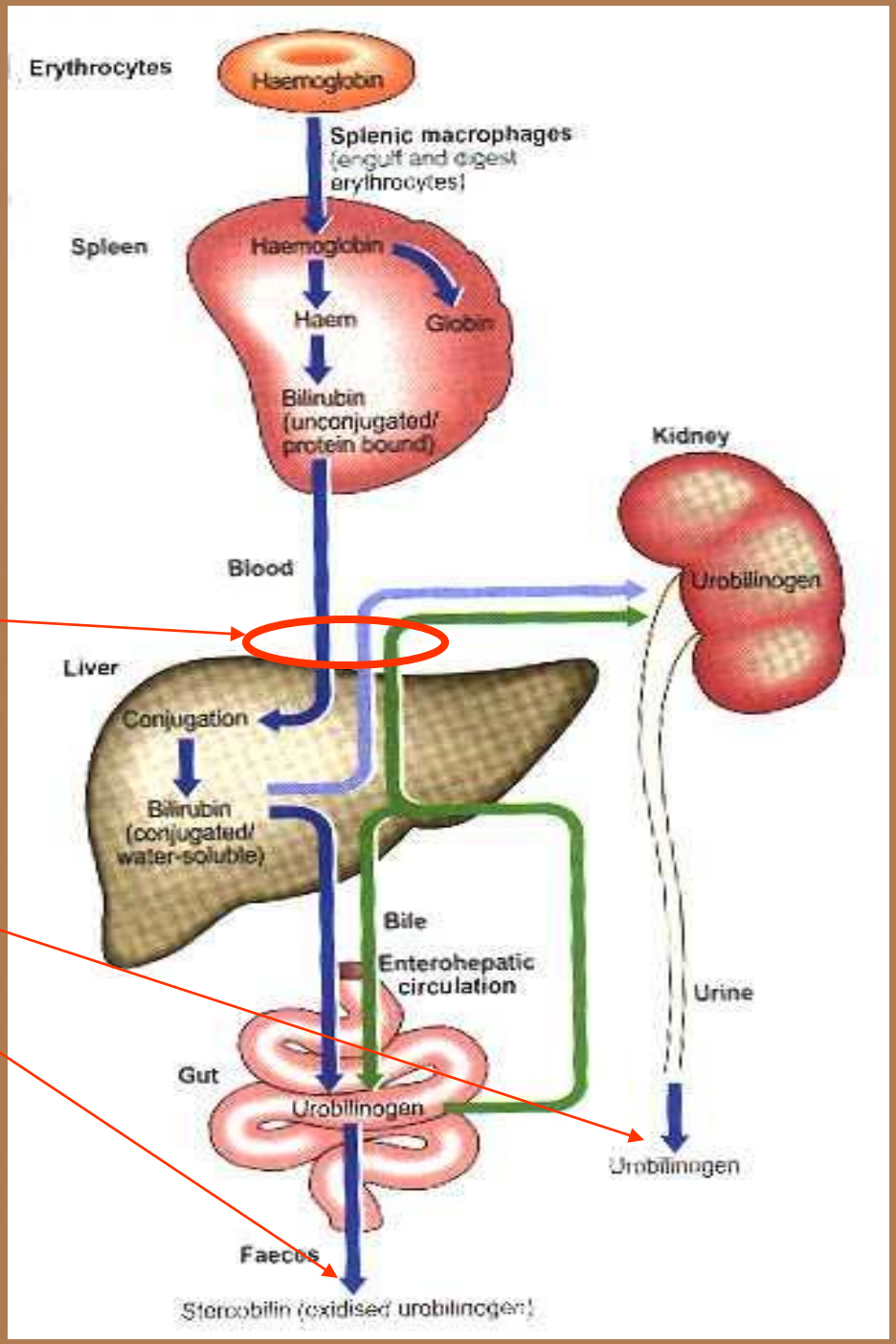
# Jaundice

- *Yellow discoloration of skin & sclera due to **excess serum bilirubin**. >40umol/l, (3mg/dl)*
- *Conjugated & Unconjugated types*
- *Obstructive & Non Obstructive (clinical)*
- *Pre-Hepatic, Hepatic & Post Hepatic types*
- *Jaundice - Not necessarily liver disease **



# Bilirubin Metabolism

- Blood
  - Conjugated & Unconjugated
- Urine – Urobilinogen
- Stool – Stercobilin



# Bilirubin in the Liver Cell

1
- Hepatocyte (HC) uptake of UCB
- Alb+UCB dissociates and UCB enters HC
- By passive diffusion into HC – Ligandin bound
- Insoluble UCB is to be made soluble in HC

2
- Conjugation in ER of Hepatocyte (HC)
- Formation of mono and di glucuronides BMG, BDG
- UDP Glucuronosyl transferase is energy depend.
- Insoluble UCB made water soluble for excretion

3
- Excretion in into biliary canaliculi
- Rate limiting step in metabolism
- CB 50% is not protein bound – no loss of albumin
- Remaining 50% $\delta$ bilirubin – Irreversibly bound

# Bilirubin in the Intestine

1. CB in bile is excreted into Duodenum

| | |
|---|---|
| CB 10% diffuses in to blood | CB excreted is not reabsorbed |

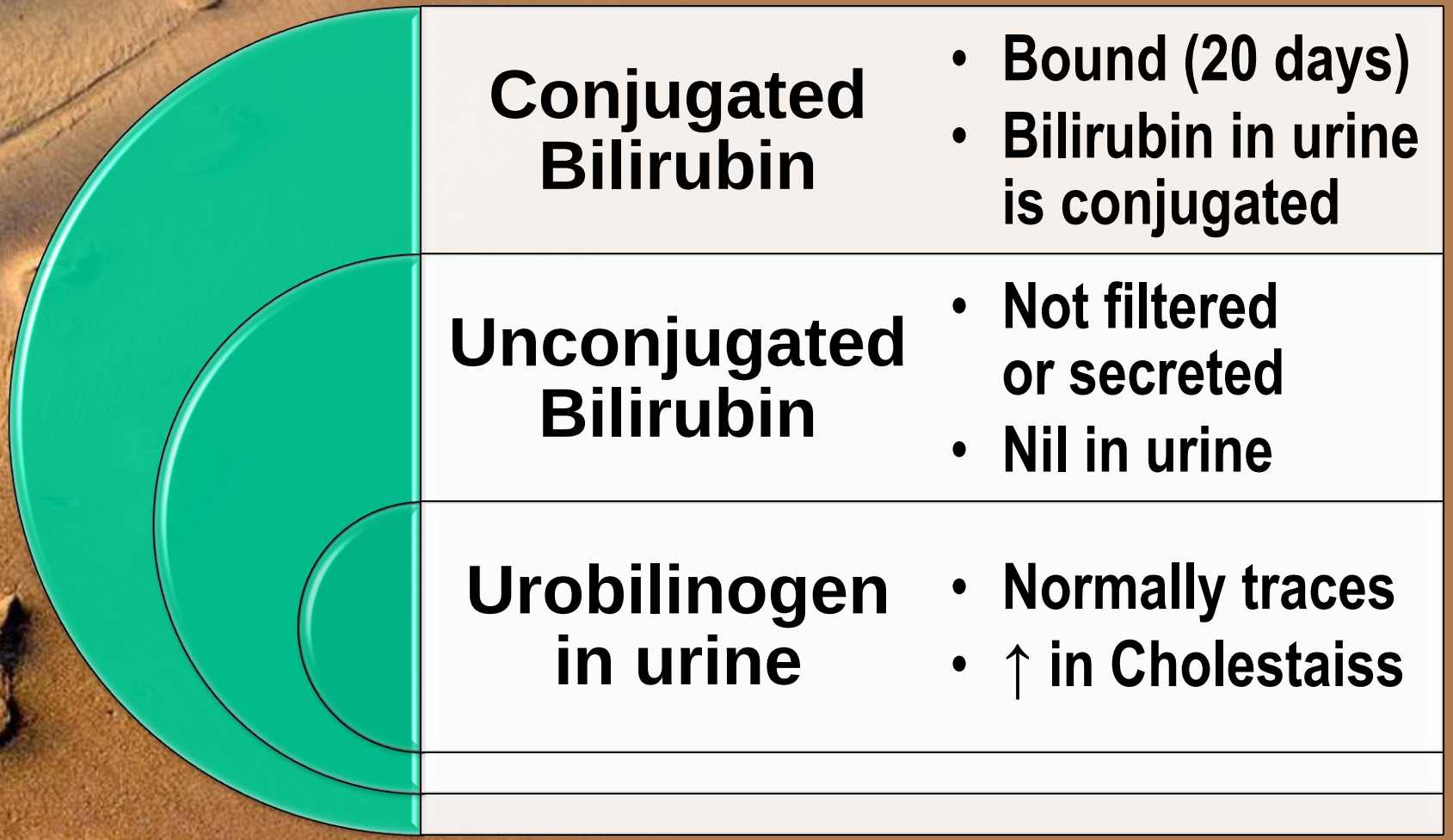
2. Conversion of CB into uro & stercobilinogen

| | |
|---|---|
| starcobilinogen excreted in stool | Part of the UBG enters EHC |

3. From gut, UBG but not CB enters EHC

| | |
|---|---|
| Kidney excretes absorbed UBG | In biliary obst. UBG absent in urine |

# Bilirubin handling in Kidney



# Common Causes of Jaundice

- *Pre Hepatic (Acholuric) - Hemolytic*
  - *Unconjugated/Indirect Bil, pale urine*
- *Hepatocellular – Viral, alcohol, drugs*
  - *Liver damage - unconjugated*
  - *Swelling, canalicular obstruction - Conjugated*
- *Post Hepatic (Obstructive) – Stone, tumor*
  - *Conjugated/Direct Bil, High colored urine.*

# Viral hepatitis

- *Acute / chronic liver damage.*
- *A, E & B,C (Primary)*
- *EBV, Yellow fever, Herpes, CMV (secondary)*
- *Cytotoxic – hepatocyte injury – necrosis.*
- *Apoptosis, inflammation, Lymphocyte infilt.*
- *Bridging fibrosis, Cirrhosis.*

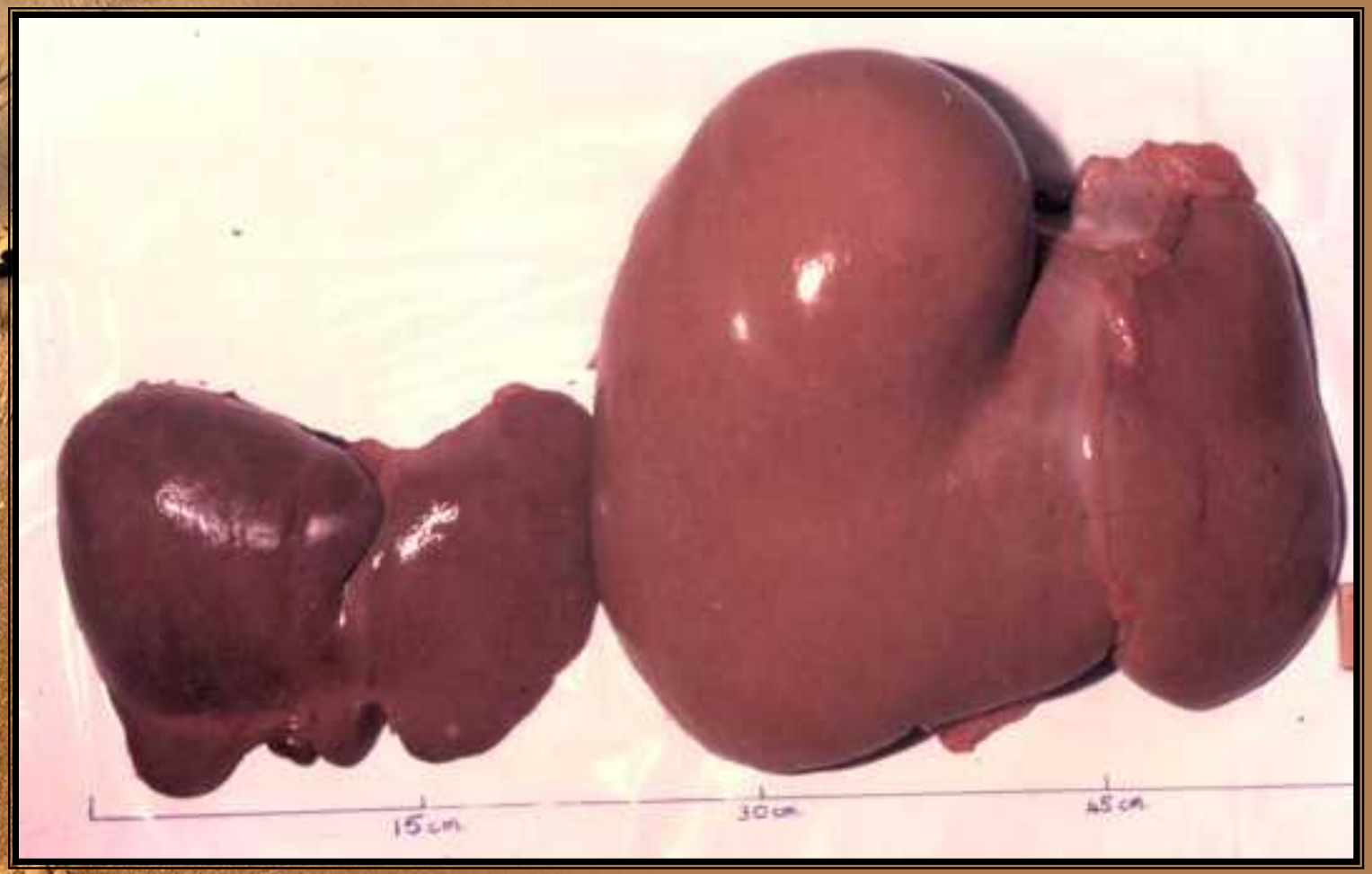
# Alcoholic Liver Injury:

- *Ethyl alcohol : Common cause of acute/Chronic liver disease*
- *Alcoholic Liver disease - Patterns*
  - *Fatty change,*
  - *Alcoholic hepatitis (Mallory Hyalin)*
  - *Alcoholic Hepatic fibrosis*
  - *Alcoholic Cirrhosis*
- *All reversible except cirrhosis stage.*

# Pathogenesis of Alcoholic Liver Injury

- *Diversion of fat & carbohydrate metabolism to alcohol – fat storage.*
- *Acetaldehyde – metabolite – hepatotoxic*
- *Increased peripheral release of fatty acids.*
- *Alcohol stimulates collagen synthesis*
- *Inflammation, Portal bridging fibrosis*
- *Micronodular cirrhosis.*

# Alcoholic Fatty Liver



# Alcoholic Fatty Liver

# Portal Hypertension

- *Portal hypertension may be defined as a portal pressure gradient of 12 mm Hg or greater.*
- *Many conditions are associated with portal hypertension, of which cirrhosis is the most common cause.*

# Symptoms of portal hypertension

- *Hematemesis or melena (gastroesophageal variceal bleeding or bleeding from portal gastropathy)*
- *Mental status changes such as lethargy, increased irritability, and altered sleep patterns (presence of portosystemic encephalopathy)*
- *Increasing abdominal girth (ascites formation)*
- *Abdominal pain and fever (spontaneous bacterial peritonitis [SBP], which also presents without symptoms)*
- *Hematochezia (bleeding from portal colopathy)*

# Cirrhosis

- *End stage complication of liver disease*
  - *"Diffuse disorder of liver characterised by; Complete loss of architecture, Replaced by extensive fibrosis with, Regenerating parenchymal nodules.*

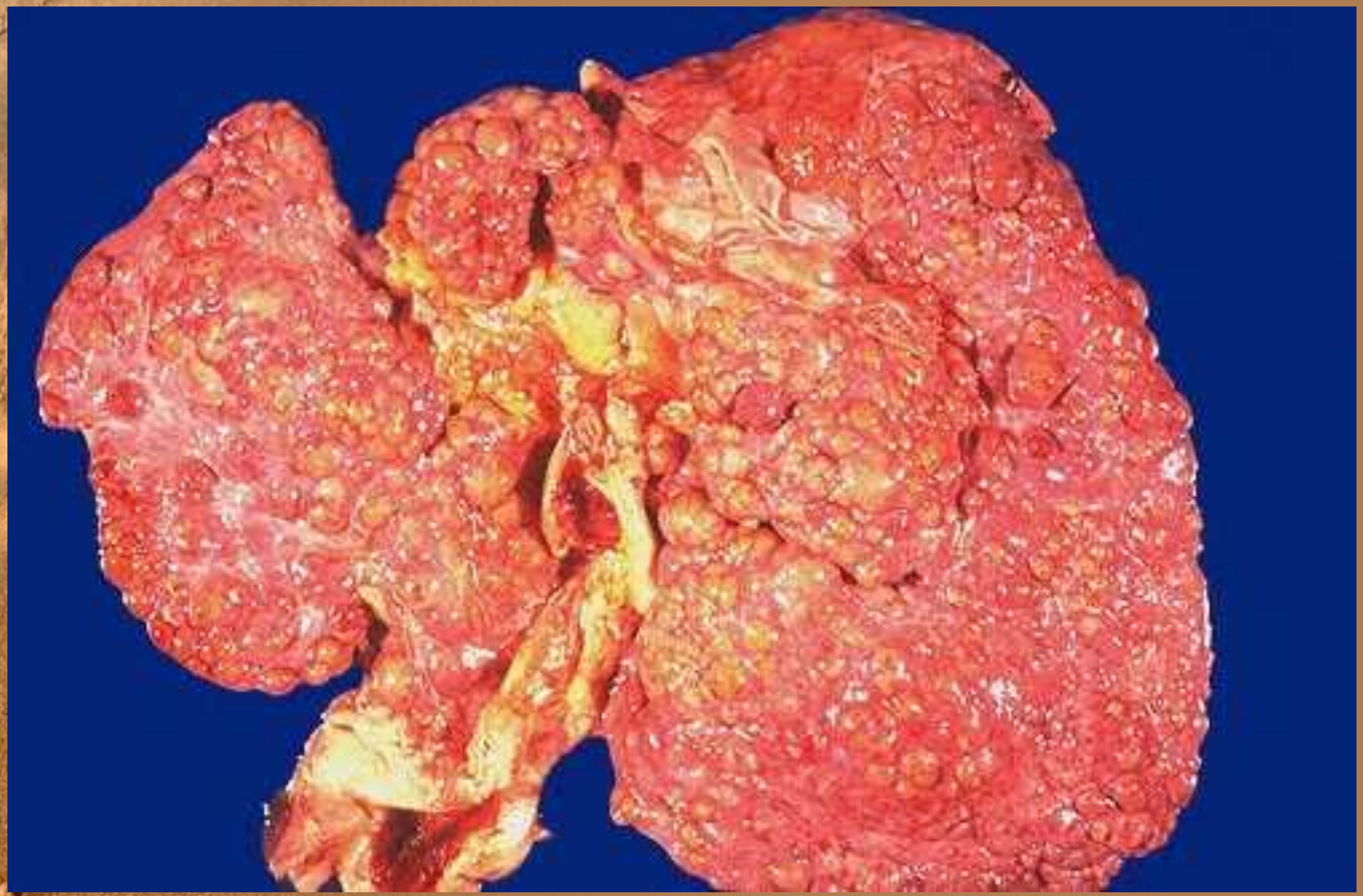
# Etiology of Cirrhosis

| | |
|---|---|
| • *Alcoholic liver disease* | *60-70%* |
| • *Viral hepatitis* | *10%* |
| • *Biliary disease* | *5-10%* |
| • *Primary hemochromatosis* | *5%* |
| • *Cryptogenic cirrhosis* | *10-15%* |
| • *Wilson's, α1AT defficiaency* | *rare* |

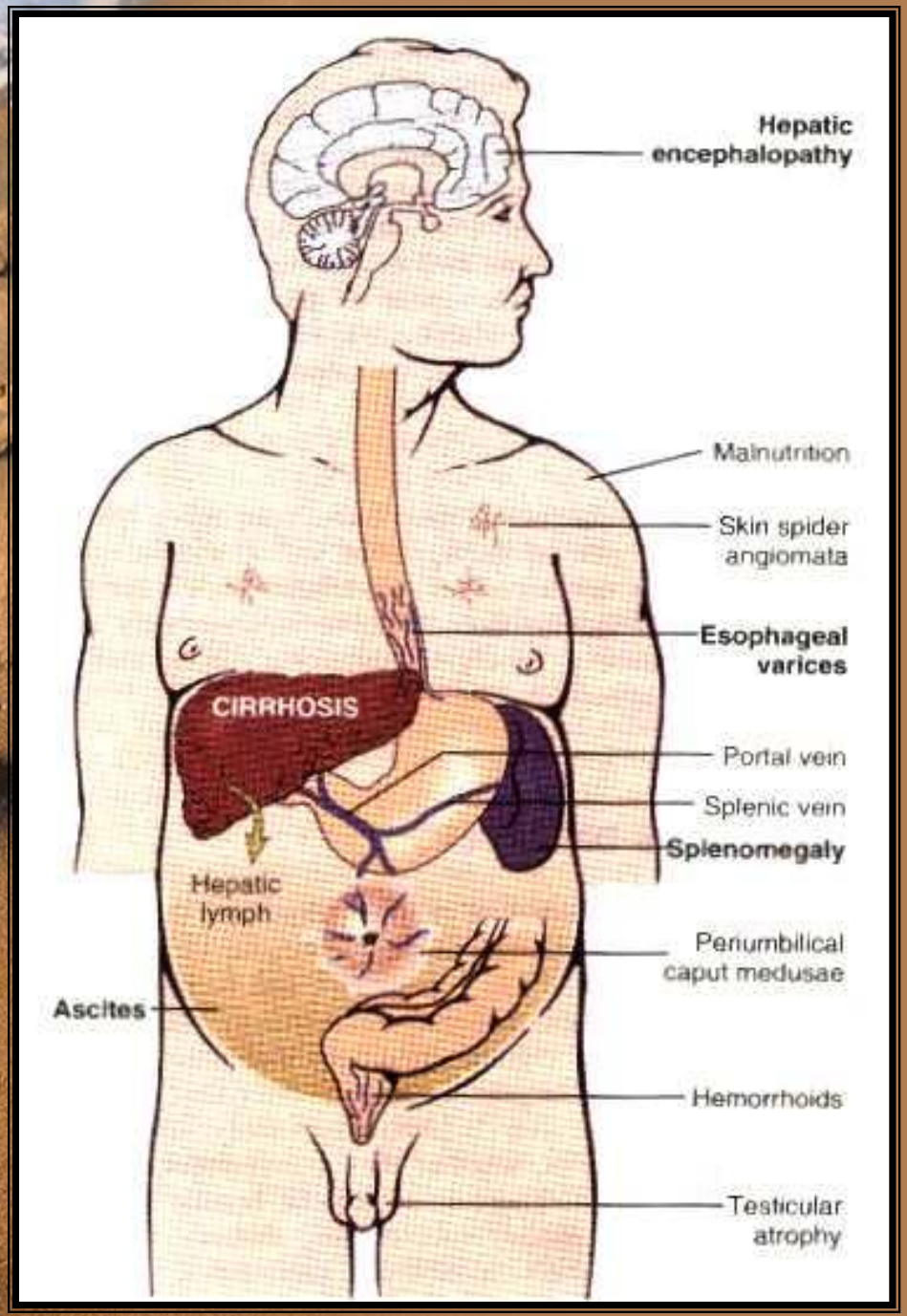
# Pathogenesis of Cirrhosis

- *Diffuse liver injury leading to necrosis.*
  - *(Alcohol, virus, drugs, toxins, genetic etc.)*
- *Chronic inflammation & healing (hepatitis).*
- *Bridging fibrosis – loss of architecture.*
- *Regeneration → nodules.*
- *Obstruction to blood flow & shunts.*
- *Portal hypertension → spleen, varices*
- *Liver failure – Debilitation, Jaundice, Ascitis, edema, bleeding.*
- *Hormone imbalance – spider nevi, testes atrophy etc..*

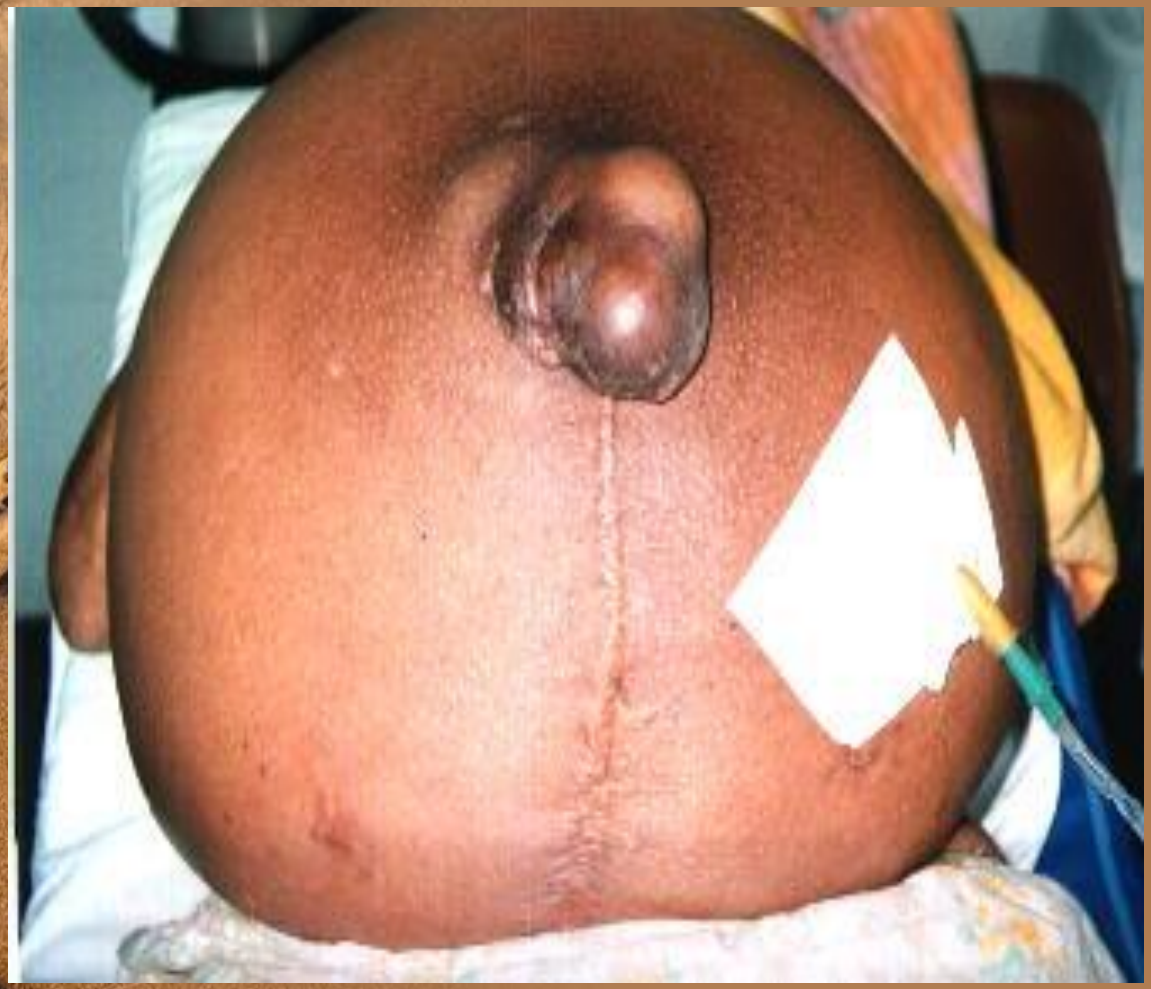
# Cirrhosis



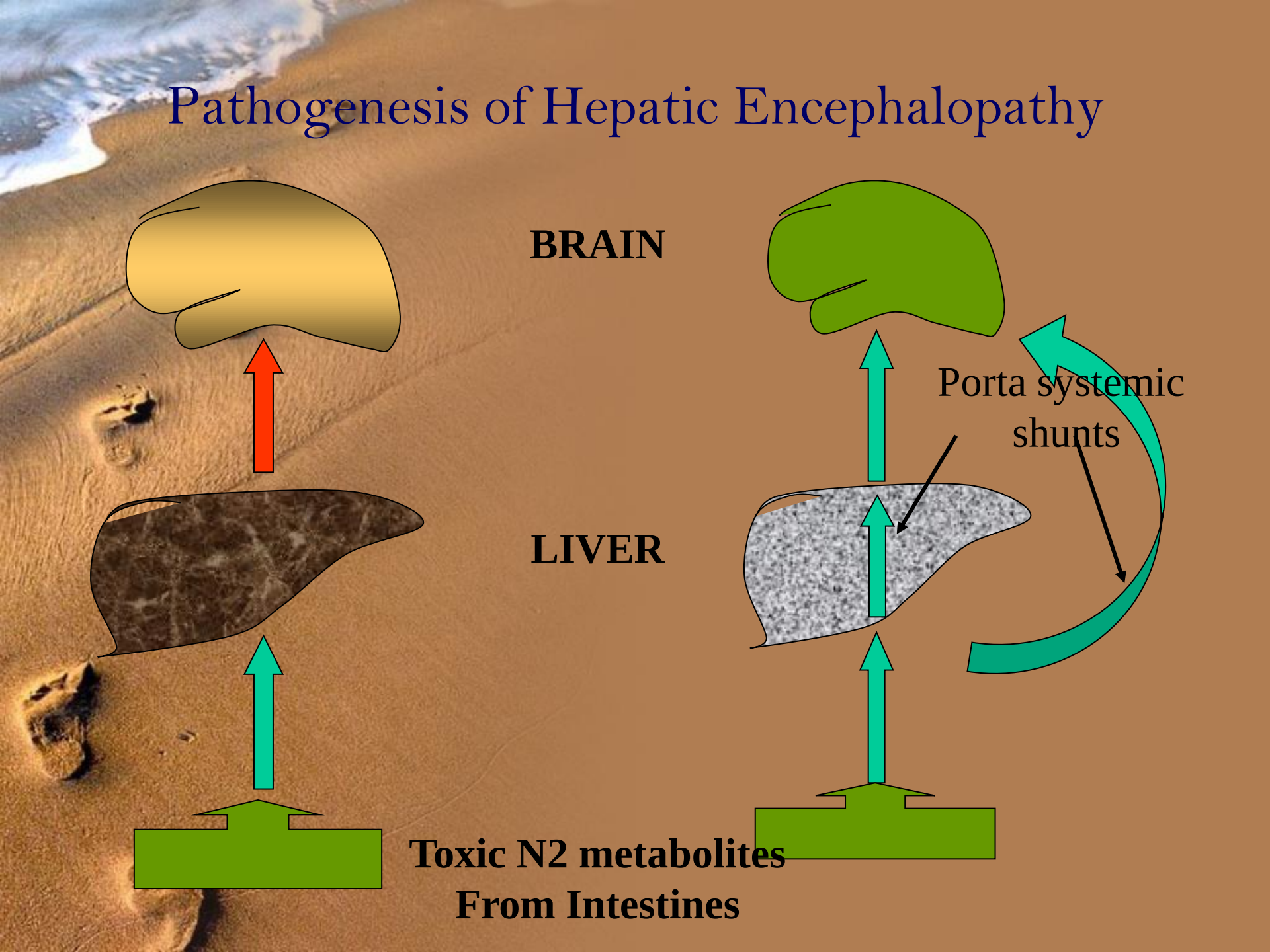
# Cirrhosis Clinical Features



# Ascitis in Cirrhosis



# Pathogenesis of Hepatic Encephalopathy



# NIDANA AND LAKSHANA OF KAMALA

पाण्डुरोगी तु योऽत्यर्थं पित्तलानि निषेवते ।
तस्यमसृग्मांसं दग्ध्वा रोगाय कल्पते ॥
हारिद्रनेत्रः स भृशं हारिद्रात्वड्.नखाननः ।
रक्तपीतशकृमूत्रो भेकवर्णो हतेन्द्रियः ।
दाहाविपाकदौर्बल्यसदनारुचिकर्षितः ।
कामला बहुपित्तैषा कोष्टशाखाश्रया मता ॥

च.चि.१६/३४–३६

भवेत्पित्तोल्बणस्यासौ पाण्डुरोगादृतेऽपि च ॥१७॥

अ.हृ.नि.१३

- *If a pandu rogi consumes pittavardhaka ahara, vihara that increases the pitta and which vitiates the rakta and mamsa to produces the commonest symptoms like haridra varna of netra,twak,nakha are observed.*
- *Dourbalyata of indriya also seen.*
- *In this disease the other symptoms like daha, avipaka, dourbalya, aruchi, karshana of the sharira are commonly observed .*
- *Even though the*
- *Kamala is classified in to two groups i.e shakhasrita kamala and koshtha shakhsrita kamala*

# Kumbha Kamala

कालान्तरात् खरिभुता कृच्छ्रा स्यात कुम्भकामला । च.चि.१६/३६

उपेक्षया च शोफाढया सा कृछ्रा कुम्भकामला । अ.ह्र.नि १६

भेदस्तु तस्याः खलु कुम्भसाह्वः शोफो महांस्तत्र च पर्वभेदः ॥
सु.उ.४४/११

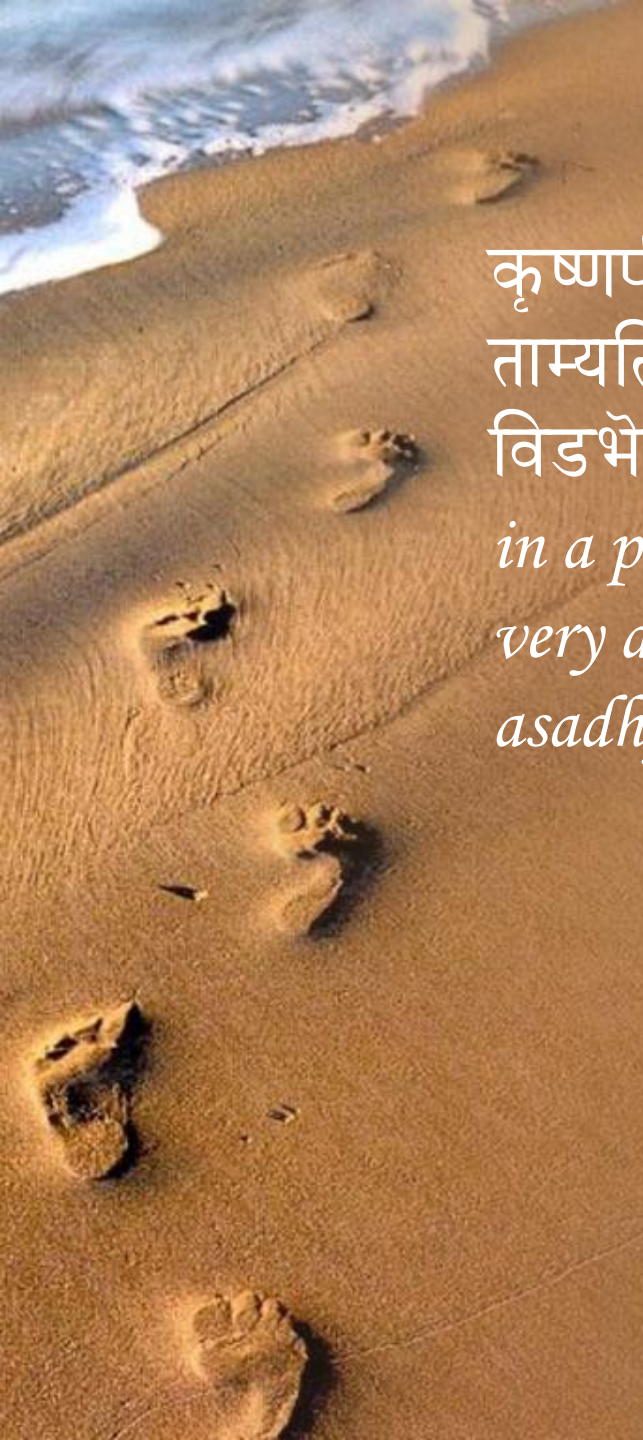
# *Lakshana of kumbha kamala*

- *Krushna peeta shkrut mootra – blackish yellow stool and urine*
- *Bhrushm shunah – severe edema of the body*
- *Sa raktakshi mukha chardi vit mutra – reddish sclera, mouth, vomitus, stool, urine*
- *Daha – burning sensation in the body*
- *Aruchi – anorexia*
- *Trushna – thrust*
- *Aanaha – constipation*
- *Tandra – drowsiness*

# Asadhya Kamala

कृष्णापीतश्कृन्मूत्रो भृशं शूनश्च मानवः ।
सरक्ताक्षिमुखच्छर्दिविण्मूत्रो यश्च ताम्यति ।
दाहारुचितृषानाहतन्द्रामोहसमन्वितः ॥
नष्टाग्निसंज्ञः क्षिप्रं हि कामलावान् विपद्यते ।
साध्यानामितरेषां तु प्रवक्षामि चिकित्सितम् ॥

च.चि.१६/३७–३८



कृष्णपीतश्कृन्मूत्रो, सरक्ताक्षि मुख, भ्रुशं शूनश्च, ताम्यति, नष्टाग्नि,नष्टसंज्ञा,हृलास,क्लम,श्वास, कास, विडभेध, छर्दि, ज्वर *if all these symptoms present in a person who is suffering from the kamala is very difficult to treat and it is considered to be asadhya*

# *Chikitsa of kamala*

## विरेचन

*In kamala virechana is considered to be a best line of treatment for pitta haranartha*

"विरेचनं पित्तहरणां श्रेष्ठः"

## शमनौशधि

त्रिफलाया गुडूच्या वा दार्व्या निम्बस्य वा रसः ।
प्रातर्माक्षिकसंयुक्तः शीलितः कामलापहः ( चक्रदत्त)

त्रिफला क्वाथ
गुडूचि स्वरस
दारुहरिद्रा क्वाथ
निम्बत्वक क्वाथ

१ तोला *each one (10ml) wit madhu two times a day*

- नवायास लोह *1 gm with madhu and ghrita in vishama matra*
- पुनर्नवादिमण्डुर *1 to 4 gm with honey*
- योगराजरस *500 mg to 1 gm /day with water*
- धान्यरिष्ट *1 tola (12 ml) with water*
- द्राक्षाघृत *1 tola (12gm) with milk* etc.

# Chikitsa of Kostha Shkahashrita Kamala

१ कामलायां तु पित्तघ्नं पाण्डुरोगाविरोधि यत् । अ.ह्र.चि १६/४०

कमलायान्तु पित्तघ्नं

पाण्डुरोग अवरोधि यत्

२ संशोध्यो म्रदुभिस्तिक्तै: कामली तु विरेचनै:। च.चि. १६/४०

३ रेचनं कामलार्तस्य स्निग्धस्यादौ प्रयोजयेत् ।

ततः प्रशमनी कार्य क्रिया वैध्येन जानता ॥ चक्रदत्त

स्नेहपान

पन्च गव्य घृत

कल्याणक घृत

महातिक्तक घृत

# *Shakhasrita kamala chikita*

तिलपिष्ट निभं यस्तु वर्चः स्रजति कामलि ।
श्लेष्मणा रुन्ध्य तत् पितं कफ हरैर्जयेत् ॥ च.चि.१६/१२४

कफ हरं पित्त वृधिकरं समं चिकित्सितमं ।
शाखाश्रय दोशस्य वृध्धि कोष्टानयनार्थम् ॥
चक्रपाणि.च.चि.१६/१२८

There are some procedures to bring the shakhasraya dosha to kostha i.e

वृध्या विष्यन्दनात् पाकात् स्रोतोमुख विशोधनात् ।
शाखा मुक्त्वा मलाः कोष्ठं यान्ति वायोश्च निग्रहात् ॥

शाखाश्रय पितं स्वामाशयमेति याति (गन्गाधर च.चि.१६/१३१)

- *Shakhasrita pitta comes and settals in its sthan i.e swamashaya then above said line of treatment should be fallowed.*
- *Katuki, nimba, bhumyamalki, bhrungaraja, vasa,amruta, mulaka these drugs are very affective to treat the shakhasrita kamala.*

## *Yogas*

- *Matulunga swarasa*
- *Amlavetas phala majja*
- *Apathya – avoid sneha dravyas and the food which is very heavy for digetion*
- *Pathya –yava, godhuma, mudga, adaki,masoor,shali, moolaka yusha, kulatha yush and laghu ahara*

# Kumbha Kamala Chikitsa

- गोमूत्रेण पिबेत्कुम्भकामलायां शिलाजतु ॥५२॥
  मासं माक्षिकधातुं वा किट्टं वाऽथ हिरण्यजम् ।
  अ. हृ.चि.१६
- *The person who is suffering from kumbha kamala should have the shilajatu with gomutra or up to one month swarna makhika or roupya makshika with gomutra.*

# Summary

- Kamala may be swatantra kamala or paratantra kamala.
- Kamala may be Koshtha shakhasrita or shakhashrita.
- Clinical manifestation simulates liver disease injury.
- Symptoms of Kumbha kamala aching to symptoms of portal hypertension.
- Symptoms of Asadhya kamala tally's with cirrhosis of liver heading to complete liver failure.


Thanks for your attention!!