STANDARD TREATMENT WORKFLOW (STW)

Jaundice

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Department of Health Research
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Standard Treatment Workflow (STW)

JAUNDICE

ICD-10-R17

SIGNS & SYMPTOMS

- Viral prodrome
- Loss of appetite/ nausea/ vomiting
- High coloured urine
- Pain abdomen
- Fever
- Itching, clay coloured stools

ESSENTIAL TESTS

SERUM BILIRUBIN > 1.5 mg/DL

Anorexia/ nausea/ vomiting Viral Prodrome	Pain Pruritus Clay coloured stool
LFT/SGOT/SGPT ↑↑ SAP ↑	↑ LFT/SGOT/SGPT ↑ SAP ↑↑
USG: NO BILIARY DILATATION	USG: BILIARY DILATATION
PARENCHYMAL LIVER DISEASE (HEPATITIS)	**BILIARY OBSTRUCTION**

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PARENCHYMAL LIVER DISEASE (HEPATITIS)	**BILIARY OBSTRUCTION**

DIFFERENTIAL DIAGNOSIS: COMMON CAUSES

JAUNDICE (ISOLATED RAISED BILIRUBIN)

- Hemolytic anaemia
- Congenital hyperbilirubinemia

OBSTRUCTIVE JAUNDICE

Benign:
- Common bile duct stone
- Biliary stricture

Malignant:
- Carcinoma gall bladder
- Carcinoma pancreas
- Peri-ampullary carcinoma
- Cholangiocarcinoma

PARENCHYMAL LIVER DISEASE

- Viral hepatitis
- Alcoholic hepatitis
- Drug induced hepatitis (eg: ATT)
- Autoimmune hepatitis

SYSTEMIC INFECTIONS (USUALLY WITH FEVER)

- Complicated malaria
- Enteric fever
- Dengue fever
- Scrub typhus
- Leptospirosis

SUPPORTIVE LAB EVIDENCE

- Isolated rise in bilirubin (indirect bilirubin > direct bilirubin)
- Normal values of SGOT, SGPT, SAP, GGT
- Normal ultrasonography of liver & biliary system

- Significantly elevated SAP (>4-5 X Upper limit of normal)
- Normal/ mildly elevated SGOT & SGPT
- Imageing show biliary obstruction

- Elevated SGOT & SGPT (usually >5 x Upper limit of normal; < 500 in alcoholic hepatitis)
- Viral markers/history of alcohol/hepatotoxic drugs

In appropriate clinical setting:
- Peripheral smear for malarial parasite or blood culture or widal test/ appropriate serology

MANAGEMENT

- **Hemolytic disease:** Start tablet Folic acid 5 mg once a day and refer to a hematologist
- **Congenital hyperbilirubinemia:** Reassurance & refer to higher center for confirmation
- Normal diet

- Start IV antibiotics if patient has fever and/or elevated TLC for suspected cholangitis
- Start IV fluids if patient dehydrated
- Refer to higher centre with facility for CT scan/MRCP for further work up
- Rx: ERCP/PTBD/Surgery
- Normal diet

- Maintain hydration
- Symptomatic Rx eg. antiemetics
- Normal diet
- Treat specific infectious illness
- Thiamine for alcoholic hepatitis
- AVOID ALCOHOL AND ALL NON PRESCRIPTION DRUGS

- Treat specific systemic infection
- Normal diet

REFERRAL TRIGGERS

INR >1.5 or rising INR- may be an early indicator of liver failure	Altered sensorium	Bleeding	Recurrent vomiting with dehydration	Hypotension (systolic BP <90 mmHg)

ABBREVIATIONS

ATT: Anti tubercular drugs
Bilirubin: Direct=conjugated, indirect=unconjugated
ERCP: Endoscopic retrograde cholangiopancreatography
LFT: Liver function test
GGT: gamma-glutamyl transferase
MRCP: Magnetic resonance cholangiopancreatography
PTBD: Percutaneous transhepatic biliary drainage
SAP: Serum Alkaline Phosphatase
SGOT: Serum Glutamic-Oxaloacetic Transaminase
SGPT: Serum Glutamic Pyruvic Transaminase
TLC: Total Leucocyte Count

This STW has been prepared by national experts of India with feasibility considerations for various levels of healthcare system in the country. These broad guidelines are advisory, and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on his/her specific condition, as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit the website of DHR for more information: (**stw.icmr.org.in**) for more information.
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