Musa S.M., Baituni S.

CHOLESTASIS SYNDROME AND THE DIFFERENTIAL DIAGNOSIS OF JAUNDICE: A SYSTEMATIC PATHOPHYSIOLOGICAL AND CLINICAL APPROACH

Tutor: PhD, associate professor Buravsky A.V.
Department of Surgical Diseases
Belarusian State Medical University, Minsk

Relevance. Cholestasis syndrome represents a clinically significant disorder of the hepatobiliary system, characterized by impaired bile formation, secretion, or flow, leading to the intrahepatic and systemic accumulation of bile constituents such as bilirubin, bile acids, and cholesterol. Jaundice is the most visible and clinically recognized manifestation of cholestasis and develops when serum bilirubin concentrations exceed physiological thresholds, resulting in yellow discoloration of the skin, sclera, and mucous membranes. Although jaundice is readily identifiable on physical examination, it constitutes only an initial clinical sign and frequently reflects complex underlying disturbances in bilirubin metabolism, hepatocellular integrity, or biliary tract patency.

Aim: studying a specific examination and treatment of patients with jaundice in the Surgical Hospital БСМП 2025.

Materials and methods. Retrospective analysis of Hospitalization and treatment in the surgical department in the hospital БСМП 2025 was performed. We used the electronic data of the patients and methods of descriptive statistics.

Results and their discussion. In 2025, clinical data from the Minsk City Clinical Emergency Hospital underscored the practical value of this diagnostic framework. Among approximately 9,500 patients treated in surgical departments, 378 presented with jaundice. Of these, 199 were women and 179 were men, with an overall mortality of 39 cases. The median age was 65 years (interquartile range: 50–74), ranging from 21 to 97 years. A total of 424 interventions were performed across the 378 patients, including 71 surgical operations (invasive or laparoscopic) and 353 endoscopic procedures. Among the endoscopic interventions, 43 were diagnostic and 310 were minimally invasive. Analysis revealed no cases of pre-hepatic jaundice. Hepatic jaundice was observed in 97 patients, with causes including liver cirrhosis, hepatitis, and malignancy; this group accounted for 18 deaths. Post-hepatic jaundice was the most common form, affecting 215 patients, predominantly due to gallstone disease, pancreatitis, and malignancies, with 11 deaths. Mixed hepatic and post-hepatic jaundice was identified in 66 patients, resulting in 10 fatalities. The highest mortality was associated with oncological pathology, followed by advanced liver disease, highlighting the prognostic significance of the underlying etiology. Among the 378 patients treated in the surgical department, the 39 deaths comprised 20 from oncological pathology, 16 from liver cirrhosis or hepatitis, 2 from ischemic heart disease, and 1 from chronic pancreatitis.

Conclusions. Cholestasis and jaundice represent challenging clinical conditions, and their differential diagnosis can be equally difficult. Cirrhosis and malignancy account for the majority of mortality in these patients.