Aetiology and management of obstructive jaundice

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Jaundice is the yellow discolouration of the skinand oonjgnctiva reoognized by the patient or his relativespushing him to seek medioal advice. This simpledefinition hides the great complexity of the underlyingbioohemioal disorder that aotually leads to this yellowdiscolouration •Jaundice may be : Medioal : responding to oonservativemedioal treatment, usually the haemolytic and thehepatocellular types, and surgical : or cholestatic,where only surgery is of radicalBu~e to the patient •The main causeS of obstructive jaundice are choledooholithiasis, pancreaticoduodenal cancer, and strictureof the COlllllllboinle duct either traumatic or inflammatory•Stones in the common bile duct may be present~formany years without giving rise to symptoms. causing actuallyohronic incomplete obstruction insufficient tocause jaundice. Stones in the common bile duct may beprimary, formed in the duct itself, or secondary beingformed in the gall bladder then migrating along theoystio duct to reach the common bile duct • Secondarydeposits are laid over this small stone from the lithogenicbile and so the secondary stone increases in size.Choledocholithiasis gives rise to intermittentobstructive jaundice, but acute obstruction of the commonbile duct by gall stones is not uncommon and givesrise to aoute obstructive ajundice. The obstruction hereis due to the bulk of the stone, muscular spasm and oedemaof the duct wall. After few days the stone eitherpasses to the duodenum or the spasm and oedema subsidealiLowing bile to flow freely again, thus the jaundiceis characteristically fluctuant •Malignant obstructive jaundioe is DoSt commonlyoaused by oaroinoma of the head of the pancreas.Herejaundice is usually insidious and as the disease progressesit becomes very deep and remains so until the end.The chronic oourse of the disease, previous historyof epigastric pain, baokache, nausea, loss of weight,increasing pruritis, dilated palpable gall bladder andthe presence of bilirubin in urine and its absence inthe putty like faeces are factors suggesting a diagnosisof carcinoma •124 -Tne diagnostic evaluation of patients with obstructivejaundice should include a comprehensive historyand physical examination wnic~ usually lead to a correctdiagnosis. A detailed informative nistory may bein some patients more important than most elaborateinvestigations • Abdominal examination is also important• A palpable gall bladder in the presence of progressivelydeepening jaundice points to a malignant aetiology• A tender gall bladder with a positive Murphy’ssign and intermittent jaundice points to choledocholithiasis.A palpable pancreatic mass in tne ~pigastriumnearly always signifies surgical incurability. A

smallliver exoludes extra~patio oholestasis in which theliver is enlarged and smooth •Biocnemioal investigations are the mainstays inthe diagnosis of jaundioe. Absenoe of faeoal and urinaryurobilinogen persistantlY for a long period usually pointsto a malignant oondition, while fluotuating levelof faecal and urinary urobilinogen is seen in choledoonolithiasis •Serum bilirubin level is markedly higher in malignantobstructive jaundice than caloular obstruotion.125Early in the ooUl'seof obstruotive jaundice .the S.G.P,T. and S.G.O.T. levels are raised specially in thepresence of oholangitis, wbile serum alkaline phosphataseis still beginning to rise, and reaches high levelsas obstruction persists •Remarkable new techniques to investigate a case ofjaundice have recently developed. They are entirely safe,painless, require no speoial technique, independant oforgan function, and above all non invasive •By ultrasonography and C.T., the diagnosis of cho l>estatic jaundice can be very accurately achieved on observingdilatation of the intrahepatic and i or the extrahepaticportion of the biliary tract. Pancreatic tumours, dilated biliary radicles, dilated splenic andportal veins could be easily and accurately delineated.Because C.T. is expensive and associated with radiationexposure, it remains the procedure of second choiceafter Ultrasonography in investigating a case with jaundice.The nature, level, and cause of obstruction couldbe demonstrated using either P.T.C. or E.R.C.P. Both126 -P.T.C. and E.R.C.P., when successful, provide valuablepreoperative information in planning the operation andthey eliminate time - consuming intraoperative manipulationslike cholangiography and pancreatography(Aranhaet. al., 1984).A point worth mentioning is the potential use ofP.T.C. as a method of temporary or permanent biliarydrainage in poor risk patients •The case is accordingly managed after thorough preoperativepreparation •