article

Cholangiocarcinoma: Experience at GIT Center

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Abstract:

Cholangiocarcinoma may arise anywhere in the biliary tree from the small intrahepatic bile ducts to the ampulla of vater. Malignant neoplasms of the extrahepatic bile ducts are being diagnosed earlier and with increasing frequency, owing to the widespread availability of ERCP.

Over a period of two years (1996-1998), 43 patients (including 7 patients with ampullary tumors) were studied respectively at the Gastroenterology & Hepatology Center. The age ranged from 19-85 (mean 52) years. There were 27 males, 16 females. Jaundice was the most common clinical presentation with a mean

duration of (9) weeks, abdominal pain & weight Loss were found in about half of the patients. Hepatomegaly was the most common clinical sign. Hilar Cholangiocarcinoma were diagnosed in 17 patients, they were diagnosed in (11) patients by using PTC, and by ERCP in (3) patients, while in (3) patients the diagnosis was made by clinical assessment and US. Using ERCP, 11 proximal Cholangiocarcinoma & 8 distal ones were diagnosed.

Cholangiocarcinoma is not uncommon tumor in Iraq. The diagnosis based on early suspicion supported by cholangiography is essential for early diagnosis & better results.

INTRODUCTION: Cholangiocarcinoma may arise anywhere in the biliary tree from the small intrahepatic bile ducts to the papilla of Vater (1). Malignant neoplasm of the extrahepatic bile ducts are being diagnosed earlier and with increasing frequency, owing to the widespread availability of ERCP (2) Cholangiocarcinoma is a form of adenocarcinoma arising from the intrahepatic or extrahepatic biliary epithelium(3). The upper third of common bile duct is the most frequent site of Cholangiocarcinoma (4).

Ampullary tumors need to be differentiated from Cholangiocarcinoma as it often present clinically at an earlier stage & is more curable at presentation(5).

Patients and Methods:

Over a period of two years (1996-1998), 43 patients (including 7 patients with ampullary-tumors) were studied retrospectively at the Gastroenterology & Hepatology Center.

All patients were evaluated by clinical Assessment, biochemical profile, and hematological profile and by US. The seven patients with ampullary tumors were diagnosed by endoscopic biopsy in three of them, and by Whipple's operation, which was done for the other four patients. In twenty two patients the diagnosis was made by ERCP, 11 patients by PTC, and in three patients by clinical assessment and US.

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Results:

The age ranged from 19-85 (mean 52) years. There were 27 males, 16 females.

Table (I) shows that jaundice was the most common clinical presentation with a mean duration of (9) weeks, abdominal pain & weight loss were found in a bout half of the patients. Hepatomegaly was the most common clinical sign.

Table (II) shows the lab findings with a mean Hb of 11.7g\dl, the ESR with a mean of (49.6 mm\hr),

total serum bilirubin ranged from (1.5 - 28mg\dl) the mean was (14.7). The mean of alkaline phosphatase was 52.1(KA).

Hilar cholangiocarcinoma were diagnosed in 17 patients, diagnosed in (11) patients by using PTC, and by ERCP in (3) patients while in (3) patients the diagnosis was made by clinical assessment and US. Using ERCP, 11 proximal cholangiocarcinoma & 8 distal ones were diagnosed.

Table I: patients with Cholangiocarcinoma & Ampullary tumor, Symptoms and Signs

Symptos & Signs	Number	0/0
Jaundice	41	95%
Abdominal pain	20	62%
Weight loss	19	44%
Anorexia	10	23%
Hepatomegly	27	64 %
Ascites	4	9%

Table II Cholangiocarcinoma & Ampullary Tumor, Investigations

Test	Range	Mean
Hb	8-15g\dcl	11.07
WBC	3-13x10cells\mm	6.4
ESR	1.5-28mg\dcl	14.7
SGPT	7-160IU\L	58.2
Alkaline phosphatase	6-123kA	52.1

Table III;US\ERCP\PTC finding in 17 patients with cholangiocarcinoma.

	US(17)	ERCP (3)	PTC(11)
I.H.B.D. * dilation.	11	3	11
Extrahepatic stricture	-	11	11

^{*}Intrahepatic biliary ducts

	US(19)	ERCP(19)
I.H.B.D .dilatation	9	11
Proximal CBD stricture	3	11
Distal CBD stricture		8
GaII Bladder Distention	4	4
Liver mass	3	
Portahepatis mass	4	

Table IV: Radiological findings of (11) proximal cholangiocarcinoma & (8) distal ones

DISCUSSION: Carcinoma of bile ducts seems to be increasing , partly reflecting wider application of newer diagnostic imaging and cholangiographic technique (4). In this study the males was slightly more than females (4). Jaundice is the most com-mon clinical presentation of patients with cholangiocarcinoma (95%) followed by abdominal pain & weight loss (in about half of the patients) which was comparable to results reported elsewhere (1). Hepatomegly was the most common clinical sign, found in (60%), as shown in table no.(I). Anamia is a feature of this tumor, this may be greater than that seen with ampullary carcinoma ,the explanation is unknown(4). The serum bilirubin & alkaline phosphatase levels was very high(4).

It was suggested that US should be the screening procedure of choice in the evaluation of hilar cholangiocarcinoma (6). US demonstrate bile duct dilatation & the level of obstruction in over (90%) of patients but less commonly identifies the cause of the obstruction(5), this was not applicable in this study, because US has relative limitations which includes the dependence of diagnostic accuracy on the skill of the operator (7). Cho-langiography (whether by ERCP or PTC) was much superior to US in diagnosing & determining the level of cholangiocarcinoma (5), how-ever in this study there was no statistically significant difference because of the small number of patients. Cholangiocarcinoma is not an uncommon tumor in Iraq, early diagnosis based on early suspicion supported by cholangiography is essential for early diagnosis & better outcome especially in distal tumors.

CONCLUSION:

Cholangiocarcinoma is increasing tumor in Iraq, partly due to the availability of the advanced radiological imaging, it can occur in young

Patients, needs early diagnosis with better radiological training & early clinical suspicion.

REFERENCES:

- 1. Finlayson N.D.C., Hayes P.C., SimpsonK. J., Tumours of the gall bladder & bile duct, In: HunterJ.A., BoonN.A., Davidson'Principles and Practice of Medicine, 18th edition, 1999; (p734-735).
- 2. Cello J.P. Tumors of the extrahepatic bileducts. In :Feldman M. Sleisenger M.H. Scharschmidt B.F.Textbook of gastrointestinal and liver disease 6th edition, W.B. Saunders company 1998; (60) pl029.
- 3. Vlaheevic Z.R. and Heuman D. Diseases of the gall bladder and bile ducts .In:Elande J.,BeimetT.J.C.,Plum F., Cecil's Textbook of medicine, 20th ed ,W.B. Saunders company.1998; (810-811).
- 4. Sherlock S. ,Dooley J., Tumors of the gall bladder and bile ducts ,In :Diseases of the Liver and Biliary System 10th edition ,Blakwell Scie-nce Ltd. 1999;642-648.
- 5. Paul M., Basuk, MD, Tumors of the Ampulla & Bile Ducts, In: Grendell H.J., MD, McQuaid R.K., MD, Friedman L.S., MD, Current Diagnosis & Treatment in Gastroenterology, Egyptian Edition, 1996; (692-699).
- 6. Gandolfi L. Bartolozzi C., Lencioni R., Diagnosis of cholastatic syndromes: imaging techniques, In:, Gentilini P.. Arias I.M., McIntyre N., Rodes J., Cholestasis, International Congress Series 1994; (307-311).
- 7. Yee J.,MD, Imaging Studies in Gastrointestinal & Liver Diseases, In:Grendell H.J., MD,McQuaid R.K.,MD, Friedman L.S., MD,Current Diagnosis & Treatment in Gastroenterology,Egyptian Edition, 1996;(212).