Diagnostic clues and prognostic factors for early non endocrinal pancreatic cancer

An Essay submitted for partial fulfillment of master degree in general surgery

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Introduction:

Pancreatic cancer accounts for only 2 percent of all new cancers in the United States, but it is the fourth leading cause of cancer deaths.¹

Also it is the eighth most common cancer causing deaths in UK, the incidence is 10 cases per 100,000 population per year, which has risen steadily over the last 25 years.²

Pancreatic cancer rarely occurs in persons younger than 50 years 5and the risk increases with age. The incidence declines slowly in white men, Women account for 57 percent of new cases.¹

Smoking, 3 diabetes and obesity4 increase risk. Up to 10 percent of patients report a family history of pancreatic cancer.5 Patients with rare familial cancer syndromes or hereditary chronic pancreatitis have increased risk.⁶

Almost all pancreatic cancers are adenocarcinoma of the ductal epithelium.⁷ More than two thirds of pancreatic cancers occur in the head of the pancreas.⁸

The clinical features depend on the size and location of the tumor as well as its metastases.²

Cancer head usually presents as steadily increasing jaundice. Cancer of the body and tail generally presents with non specific pain and weight loss.⁸

A patient history, physical examination, serum bilirubin and alkaline phosphatase levels can point to the pancreatic cancer, the serum tumor marker cancer antigen (CA) 19-9 may help confirmation of the diagnosis in symptomatic patient.⁹

Although conventional computed tomography (CT) and abdominal ultrasonography are appropriate for initial imaging, dual phase helical (CT) scanning is the best option, and the most sensitive test, and it identifies 98 percent of pancreatic cancer and distant metastases.¹⁰ Although, recent reports have high lighted the improved performance of thin-section helical CT compared with edoscopic somography.¹⁰

If CT is indeterminate or negative with high clinical suspicion, endoscopic ultrasonography should be performed next.¹⁰

Fine needle aspiration biopsy guided by EUS may provide tissue diagnosis in patients who are not surgical candidates.¹⁰

MRCP is replacing diagnostic ERCP and PTC. For evaluation of the biliary and pancreatic ducts.¹¹

Early detection of small pancreatic tumors will require screening of a symptomatic subjects for pancreatic cancer, screening of a symptomatic subjects for pancreatic cancer will require at least two sieves to enrich the population to allow cost-effective screening.¹²

The first sieve would be a high-risk group, ie, a population of subjects at higher than average risk of pancreatic cancer. Two highrisk groups have been targets for screening; hereditary pancreatic cancer kindred's and new onset diabetes.¹²

The dismal prognosis of patients with pancreatic cancer is mainly due to the fact that 80 - 90 % of patients have unrespectable disease at the time of diagnosis.¹¹

Over all, only a bout 5 percent of all people with pancreatic cancer will live 5 years after diagnosis, for the 8 percent people diagnosed with local disease, the 5 years relative survival rate is only 19 percent, for those with regional disease (24 percent), the 5 years relative survival rate is 8 percent, in pancreatic cancer patients with distant disease (52 Percent) the 5 years relative survival rate is 2 percent, in 14 % of patients the stage is unkown.⁴

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