

Pancreatic Cancer: State of the Art and Current Situation in the Islamic Republic of Iran

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ABSTRACT

Compared to western countries, pancreatic cancer has a relatively low incidence in Iran. It is rarely diagnosed before the fifth decade in Iran and most of the patients are older than 60 at the time of diagnosis like to the western countries, where pancreatic cancer is a disease of advanced age. The incidence of the disease in some young patients suggests a possible role of genetic defects, which is probably due to high consanguineous marriages in Iran. Despite many efforts in improving diagnosis and treatment of pancreatic cancer, this disease has still dismal prognosis. The analysis of the spatial spread of the pancreatic cancer in Mazandaran and Golestan, two provinces in the Caspian Sea region in the north of Iran, which comprise a low incidence of pancreatic cancer, showed that the disease, unlike other gastrointestinal tract cancers, does not exhibit high incidence clusters in the region. Our knowledge about the molecular and cellular pathology of the pancreatic cancer has progressed, and many agents including anti-EGFR, anti-VEGF, and immunotherapeutic agents have been applied for the treatment of the disease. However, surgery remains the only curative approach and further research is paramount to identify novel diagnostic and predictive biomarkers for early diagnosis and treatment stratification. Pancreatic cancer requires an interdisciplinary approach which involves surgery, pathology, radiology, gastroenterology, oncology, and palliative care provided in dedicated, specialized centers.

Govaresh/ Vol. 14, No.3, Autumn 2009; 189-197

INTRODUCTION

Pancreatic cancer – histological classification

Ductal pancreatic adenocarcinoma is the most

common malignant pancreatic neoplasm, accounting for more than 90% of malignant solid pancreatic tumors. In addition, cystadenocarcinomas, acinar cell cancer, adenosquamous carcinomas, mucinous carcinomas and giant cell tumors are observed. Similar to colorectal cancers, pancreatic adenocarcinomas appear to develop in an adenoma-carcinoma sequence from preneoplastic lesions, so called pancreatic intraepithelial neoplasias or PanINs (1).

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Received: 9 Dec. 2009

Edited: 2 Jan. 2010

Accepted: 3 Jan. 2010