

Epidemiology and risk factors for exocrine pancreatic cancer in a Northern African population

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Abstract

Background: The etiology of carcinoma remains largely unknown. Although epidemiological studies have reported that a lot of environmental factors may contribute to the event of carcinoma, only age and cigarette smoking are established as consistent risk factors for the disease. **Objective:** Studying the biological clinical and histological features of patients with carcinoma so as to assess the possible risk factors for carcinoma in a very geographical area population. **Methods:** An epidemiological retrospective descriptive study has been performed at the extent of surgery department of the University Hospital of Sidi bel Abbes region, western Algeria, from 2007 to 2013. **Results:** a complete of 87 patients were diagnosed with cancer of the pancreas (55 males and 32 females) with a mean age of 63.1 years, starting from 16 to 96 years old, and a sex ratio of 1.71. In 92% of cases, pancreatic tumors were located at the pinnacle of the pancreas; the foremost predominant histological type was the adenocarcinoma; cigarette smokers represented the speed of 24.3% and alcoholics 13.5%. the foremost recorded disease among patients case history was DM (25.28%). About 35.63% was the prominent rate of patients who underwent cholecystectomy and was diagnosed with carcinoma after a mean duration of 5.23 years. Our patients were mostly diagnosed with cancer at M1 and T3 stages. **Conclusion:** in step with our results, cholecystectomy could possibly be a risk factor for carcinoma in Algerian population. In the last decade, a trend towards a rise of carcinoma incidence and mortality rates was observed irrespective of the gender. Analysis of statistic data reported by SEER 13 demonstrated that between years 2000 and 2014, there's an age-specific trend towards a rise in carcinoma incidence in two particularly group of ages, 20 - 29 years old and > 80 years within the USA .

When ethnicity-specific trends were analyzed, the incidence and mortality rates were higher in whites than in blacks patients, which may be a reverted trend if we consider that between 1975 and therefore the late 1990s the amount of deceased for carcinoma was increased among the black population and so significantly decreased. Temporal trends about the carcinoma incidence and mortality over the amount 2018 - 2040 were abstracted from GLOBOCAN 2018. it had been observed that there's a trend towards a

rise of carcinoma incidence (+77.7% with 356,358 new cases) and mortality (+79.9%, 345,181 deaths) from 2018 to 2040. These trends vary significantly internationally. the very best incidence of carcinoma are going to be registered in Africa (+114.1%), followed by Latin America and also the Caribbean (+99.3%). On the contrary, the bottom incidence are registered in Europe (+29.3%). Some regional differences are going to be observed between men and girls. In men, the very best incidence rates are registered in North America (+52.3% men versus +48.7% women) and Europe (+30.7% men versus +27.8% women). On the opposite hand, in Asia, Latin America and therefore the Caribbean and Oceania, the best incidence of carcinoma are going to be registered among women (women versus men: 97.4% versus 81.9%, 74.3% versus 70.0% and 101.7% versus 96.6%, respectively), while in Africa, the estimated incidence are the identical in both sexes.

From 2018 to 2040, the identical trend is additionally observed for the estimated fatality rate for carcinoma among continents in both sexes and for the regional differences between men and girls. Indeed, the best rate is estimated to be in Africa (+114.8%), followed by Latin America and also the Caribbean (+101%), while all-time low incidence are registered in Europe (+31.6%). Additionally, in North America, Europe and Africa, the best mortality rates are going to be registered in men (men versus women: +58.7% versus 55.2%, +33.0% versus +30.1% and 115.0% versus 114.5%, respectively), while in Asia, geographic region and therefore the Caribbean and Oceania, the very best mortality rates of carcinoma are registered in women (women versus men: 98.3% versus 84.4%, 103.4% versus 98.4% and 77.9% versus 74.6%, respectively). Previous studies have shown that in both sexes, temporal trends in cigarette smoking prevalence were associated with temporal trends in carcinoma mortality. In developed countries, decreased smoking, particularly in men, has been well known because the main contributor to the decrease in mortality trends from carcinoma , particularly within the USA, UK and Australia where the tobacco control began to be implemented earlier. Besides cigarette smoking, alcoholic abuse, high consumption of saturated fat and reduced physical activity can also influence carcinoma mortality. Interestingly, the very fact that in underdeveloped

countries like Africa there'll be a dramatic increase of carcinoma incidence and mortality suggesting that socioeconomic disparities have a major impact on the trends, as improved diagnostic tools and access to therapies could also be very limited. Possible ways to reverse these trends and improve carcinoma patient outcomes are through the prevention (lifestyle change) and more research and increased awareness of the disease and its symptoms. Early stage and tiny tumor size (< 2 cm) are two important prognostic factors for carcinoma . Scientists and

clinicians round the world are working tirelessly to unravel a number of pancreatic cancer's biggest questions. Indeed, it might be important to know the mechanism that turns a healthy pancreatic cell into a cancerous one and to spot clues, or biomarkers that are present within the early and more treatable stage of the disease. These findings will consequently result in new treatments that may selectively and effectively kill the cancer cells and lower the mortality with a better expectation of survival.

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