Incidence of Pancreatic Adenocarcinoma Has Increased Significantly in Non-Hispanic American Indian/Alaskan Native Men Since 2000

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Background:

Pancreatic cancer (PC) has been noted to be the second most common type of gastrointestinal cancer in the United States (US), and highest incidence has been noted in black patients. However, careful examination of how PC and, specifically, pancreatic adenocarcinoma (PAC) have affected patients of different races, ethnicities, and gender have not been examined recently.

Methods:

Incidence was age-adjusted to the 2000 US Standard Population, and Annual Percent Change (APC) was calculated by fitting a weighted least-squares regression line to the natural logarithm of the rates using the calendar year as a regressor variable.

Results:

In 2017, Non-Hispanic Black (NHB) patients continued to have the highest incidence of PC at 16.292 (per 100,000). Other incidence rates include Non-Hispanic Whites (NHW) at 12.741, Non-Hispanic AI (NHAI) at 11.043, Non-Hispanic API (NHAPI) at 9.908, and Hispanic at 11.118. Only NHAI had an APC greater than 1 at 1.327 between 2000 and 2017, with incidence in 2000 at 10.787, although APC was not statistically significant; however, NHW, NHAPI, and Hispanics all had significant increases in APC ($p<0.05$). All races and ethnicities had significant increases in APC ($p<0.05$) for PAC specifically, with incidence ranging from 5.860 in NHAPI to 9.934 in NHB in 2017. APC was, again, greatest in NHAI (1.833, $p=0.015$). Furthermore, APC for PAC increased to 5.342 ($p=0.001$) when patient population was restricted to just men, with incidence of 9.987 in 2017 compared to 3.198 in 2000. This significant increase in APC for PAC was not seen in women (APC -1.742, $p=0.122$).

Conclusion:

While most recent data still underscore that NHB experience the highest incidence of PC and PAC, a startling trend suggests that NHAI men, but not women, are at disproportionately increased risk of PAC now as compared to only 17 years prior.