Letters to the Editor

Familial pancreatic adenocarcinoma and HLA-typing

Sir,

Familial pancreatic adenocarcinoma is a rare, but well-described entity.^{1–3} It occurs in family members without exposure to known aetiological factors and some genetic factor seems likely. Despite this, the HLA-status of patients with pancreatic cancer with first-degree relatives who have developed the same disease has never been examined.

An 83 year old man with known problems of atrial fibrillation, hypertension and carotid transient ischaemic attacks presented with a one-week history of painless jaundice, pruritus and dark urine. Large duct biliary obstruction was suspected. Computerized axial tomography of the upper abdomen showed gross intra- and extrahepatic bile duct dilatation with a mass in the head of the pancreas. At laparotomy, a fixed mass in the head of the pancreas was confirmed and a palliative by-pass procedure performed. Biopsy demonstrated moderately well-differentiated pancreatic adenocarcinoma. The patient died one month later.

Eleven years earlier, an older brother, then aged 75, presented with painless jaundice, dark urine and pruritus. Deep jaundice and a palpable gallbladder were found. Diabetes mellitus was confirmed by glucose tolerance testing and controlled by dietary management. Laparotomy showed a large, fixed adenocarcinoma in the head of the pancreas. A palliative by-pass procedure was undertaken. The patient died 4 months later.

A genetic factor responsible for familial clustering of cases has been suspected but never identified. Such a factor, if it exists, may explain familial susceptibility to some carcinogenic agent(s). To date, none of the case reports or literature reviews of this subject have examined the HLA-status of these cases with familial clustering. The younger brother's HLA type was A1, A3, B8, B40. Although earlier work⁴ showed no evidence of an association of specific HLA type with pancreatic cancer cases occurring in isolation, HLA-analysis of familial cases might be more relevant if there is a genetic link. If such a link existed, pancreatic cancer might be predictable in asymptomatic first-degree relatives of groups of two or more family members with this malignancy. One study documented the deaths of four siblings in a sibship of six¹ from pancreatic adenocarcinoma all in their seventh and eighth decades. Case reports of three siblings⁵ and three generations⁶ dying from this disease also exist. Danes and Lynch⁷ described a father, son and two cousins aged between 51 and 69 years all of whom died from this disease.

Analysis of risk factors for pancreatic adenocarcinoma was made in both cases. The older brother was diabetic.⁸ Neither brother had had pancreatitis,⁹ smoked¹⁰ or drank alcohol or coffee to excess.¹¹ There was no known exposure to toxic chemicals.¹² Both worked as farmers all their lives; the risk among farmers is small but significant.¹³ There was no history of increased incidence of other neoplasms in their family. Both brothers lived in the same district but in separate homes for more than 40 years.

We recommend HLA-typing in first-degree relatives of cases of clustering of two or more family members with

pancreatic cancer as a means of identifying a likely genetic link in familial susceptibility to this disease.

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References

- McDermott, R.P. & Kramer, P. Adenocarcinoma of the pancreas in four siblings. *Gastroenterology* 1973, **65**: 137–139.
- Friedmann, J.M. & Fiaklow, P.J. Familial carcinoma of the pancreas. *Clin Genet* 1976, **9**: 463–469.
- Reimer, R.R., Fraumeni, Jr, J.F., Ozols, R.F. & Bender, R. *Lancet* 1977, **i**: 911–912.
- Terasaki, P.I., Perdue, S.T. & Kickey, M.R. HLA Frequencies in Cancer: A Second Study. In: J.J. Mulvihill, R.W. Miller & J.F. Fraumeni Jr (eds) *Genetics Of Human Cancer*. Raven Press, New York, 1977, p. 321.
- Dat, N.M. & Sontag, S.J. Pancreatic carcinoma in brothers (Letter). *Ann Intern Med* 1982, **97**: 282.
- Ehrenthal, D., Haeger, L., Griffin, T. *et al.* Familial pancreatic adenocarcinoma in three generations. A case report and a review of the literature. *Cancer* 1987, **59**: 1661–1664.
- Danes, S. & Lynch, H.T. A familial aggregation of pancreatic cancer. An *in-vitro* study. *JAMA* 1982, **247**: 2798–2802.
- Kessler, H. & Nati, J. Cancer mortality among diabetics. *Cancer* 1970, **44**: 673–686.
- Comfort, M.W. & Steinberg, A.G. Pedigree of a family with hereditary chronic relapsing pancreatitis. *Gastroenterology* 1952, **21**: 54–63.
- Gold, B.E., Gordis, L., Deiner, D.M. *et al.* Diet and other risk factors for cancer of the pancreas. *Cancer* 1985, **85**: 466–467.
- MacMahon, B., Yen, S., Trichopoulos, D. *et al.* Coffee and cancer of the pancreas. *N Engl J Med* 1981, **304**: 630–633.
- Lin, R.S. & Kessler, H. A multifactorial model for pancreatic cancer in man: epidemiological evidence. *JAMA* 1981, **245**: 147–152.
- Associations of cancer site and type with occupation and industry from The Third National Cancer Survey Interview. *J Nat Cancer Inst* 1977, **59**: 1147–1185.

Plasmodium vivax malaria presenting with urticaria

Sir,

Plasmodium falciparum malaria has been known to be associated with urticaria,^{1,2} but *Plasmodium vivax* malaria presenting with urticaria is a rare association. We encountered a patient complaining of two attacks of high grade fever with chills and rigor, on alternate days lasting for 5–6 hours and each time associated with urticarial rashes. He was given chlorpheniramine maleate and dexamethasone by injection on the first day of fever, which relieved both fever and urticaria. The patient had no history of fever with urticaria or any allergic reaction in the past. On examination he had a temperature of 104°F with tachycardia of 140 per