

## Letters

PII: S0959-8049(97)00045-2

### Remarkable Age-dependent Sex Differences in the Incidence of Adenocarcinoma of the Gastric Cardia and Oesophagus in The Netherlands

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RECENTLY, IT has been recognised that time trends in the incidence of adenocarcinoma of the oesophagus and gastric cardia differ significantly from other oesophageal or gastric malignancies. In the United States, the rate of increase during the 1970s and 1980s of these malignancies surpassed that of all other cancer sites [1]. In Europe, comparable time trends in the incidence of these malignancies have been reported [2-4]. Apparently, incidence rates in males have risen faster than in females, resulting in high male-female ratios for these cancers.

Data were obtained from The Netherlands Cancer Registry [5]. In the Netherlands, we have found that in the five year period 1989-1993, 4106 cases of oesophageal cancer and 12513 cases of stomach cancer were diagnosed. Of these, 1312 adenocarcinomas were located in the lower third of the oesophagus (58% of all malignancies in this subsite) and 2585 adenocarcinomas in the cardia (94% of all malignancies in this subsite). Male-female ratios were calculated using age-specific incidence rates (30-59, 60-74 and 75+ years). The M/F ratios of other malignancies in the oesophagus and the gastric cardia were approximately the same in all age groups, between 1.5 and 2.3 (see Figure 1). However, with adenocarcinomas in the lower third of the oesophagus and in the gastric cardia, extremely high M/F

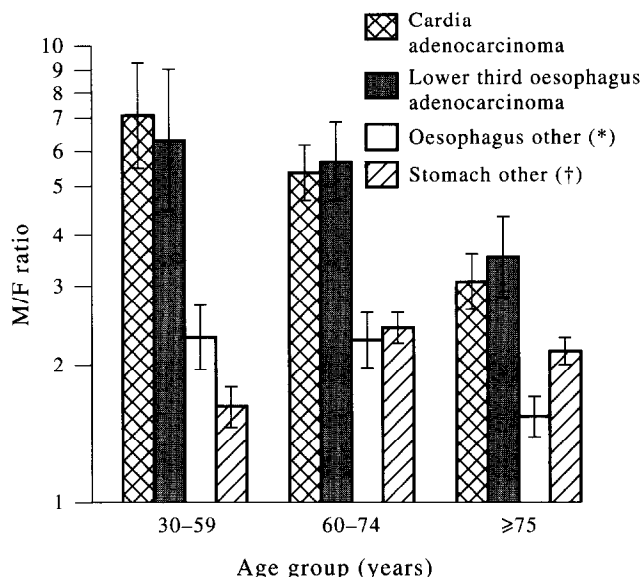


Figure 1. Male-female ratios and 95% confidence intervals of oesophageal and stomach cancer according to morphology, subsite and age. The Netherlands Cancer Registry, 1989-1993. Subsites (ICD-O): 150.0-4,8,9 = oesophagus, other; 150.5 = oesophagus, lower third; 151.0 = stomach, cardia; 151.1-9 = stomach, other. Morphology (ICD-O): 8140-8580. \*Including non-adenocarcinoma of the lower third of the oesophagus. †Including non-adenocarcinoma of the gastric cardia.

ratios were observed in the younger age groups and the M/F ratios decrease with increasing age. In the age group 75+ years and older the differences between the M/F ratios were small.

High male-female ratios for adenocarcinoma of the distal oesophagus and cardia, especially in younger age groups, have been published before [3]. Possibly, the high male-female ratios at younger ages are an indication of a large difference in exposure to a risk factor for cardia and distal oesophageal cancer between males and females. It is possible that this risk factor has a short latency period and that males are exposed more than females when younger. If not, then the decreasing M/F ratios are an indication of a cohort effect and the incidence of these malignancies will continue to rise in the coming years in males.

In aetiological research of cardia and distal oesophagus cancer, special attention should be paid to specific exposures in young males.

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 Received 27 Nov. 1996; accepted 12 Dec. 1996.