Incidence and survival of rare urogenital cancers in Europe

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ABSTRACT

Background: The RARECARE project aims at increasing knowledge of rare cancers in Europe. This manuscript describes the epidemiology (incidence, prevalence, survival) of rare urogenital cancers, taking into account the morphological characterisation of these tumours.

Methods: We used data gathered by RARECARE on cancer patients diagnosed from 1995 to 2002 and archived in 64 European population-based cancer registries, followed up to December 31st, 2003 or later.

Results: The annual number of males that develop penile cancer in the EU is estimated at 3100, which is equivalent to an age standardised rate (ASR) of 12 per million males. The 5-year relative survival rate is 69%, while squamous cell carcinoma is the predominant morphological entity. Each year around 650 persons in the EU develop cancer of the urethra and 7200 develop cancer of the renal pelvis or ureter (RPU). The ASR for cancer of the urethra and RPU is 1.1 (males 1.6; females 0.6) and 12 (males 16; females 7) per million inhabitants, respectively. The 5-year relative survival rate for cancer of the urethra and RPU is 54% and 51%, respectively. Transitional cell carcinoma is the predominant morphological entity of cancer of the urethra and RPU.

Conclusions: In view of the low number of cases and the fact that one third to one half of the patients die of their disease, centralisation of treatment of these rare tumours to a select number of specialist centres should be promoted.

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1. Introduction

In this review we have identified three main groups of rare urogenital cancers: cancer of the penis, cancer of the urethra and cancer of the upper urinary tract (renal pelvis and ureter).

Cancer of the penis is the rarest cancer of the male genital tract, especially in Islamic countries and Israel. Compared to Europe and North America, the incidence is higher in Asia, Africa and South America. The highest rate world-wide was reported for Brasilia (Brazil) during 1998–2001 and amounted to an age standardised rate (ASR) of 40 per million males.

Risk factors for the development of penile cancer are multifactorial. The presence of phimosis has been shown to be strongly associated with the risk of developing penile