Sir,

Assays for the detection of hepatitis C virus (HCV) antibodies have been available since 1989, at which time it was shown that HCV is the major cause of non-A and non-B hepatitis (1). It seems likely that HCV, when highly transmissible with transfusion, might also be transmitted by sexual contact as is the case for hepatitis B virus (HBV). Some studies have shown that sexual transmission of HCV is of importance (2-4); other studies have, however, concluded that the risk of sexual transmission is very low (5-7).

Previously we found a high prevalence of anti-HCV in injecting drug-users, but a low prevalence in homosexual men (8). In order to further elucidate the risk of sexual transmission of HCV, we examined the prevalence of anti-HCV among a heterosexual non-drug using venereological clientele, previously examined for HBV markers.

MATERIALS AND METHODS

The sera of 465 heterosexual non-injecting patients from the outpatient Venereal Disease Clinic of Copenhagen were examined. The material comprised 278 male and 187 female patients, with a mean age of 28 years (range 16-68 years). The patients were enrolled in a prospective serological study of HBV markers in 1991, at which time demographic data and data about risk behaviour such as sex, age, country of birth, a history of hepatitis or transfusion, partner with a history of hepatitis or drug use, number of sexual partners last 6 months and lifetime, history of STD and, if known, previous HIV test result were also collected (9).

All sera were tested for anti-HCV with two different second-generation EIA tests (Abbott Diagnostic Division and Ortho Diagnostics). Repeatedly reactive specimens in both EIA tests were retested with a second-generation recombinant immunoblot assay (RIBA) (Chiron, Emeryville, USA). The sera were considered anti-HCV positive if repeatedly reactive for anti-HCV on both EIA tests and positive for anti-HCV by RIBA.

RESULTS

Out of the 465 sera, anti-HCV was detected in 7 sera (1.5%) by EIA, of which 4 (0.9%) were indeterminate and 3 (0.6%) were confirmed positive by HCV-RIBA. One of these sera came from a 32-year-old man with a history of transfusion. The remaining 2 anti-HVC positive sera (0.4%) came from one man and one woman, both born in Denmark, aged 28 and 20 years, respectively. The male patient had serological markers indicating previous HBV infection but no HIV antibodies whereas the female patient had HIV antibodies but no HBV markers. The number of sexual partners were one during the last 6 months and 50 (for the male) and 20 (for the female) during lifetime. The female patient had had a drug-using partner but never injected drugs herself.

Both patients had had genital warts and the female patient had a history of chlamydial infection besides being HIV-infected.

DISCUSSION

The Nordic countries are HCV low prevalence areas, with 0.05-0.30% of new blood donors being found seropositive (10). The most important risk groups are injecting drug-users, in whom prevalences of 98, 58, 70 and 80% have been found in Denmark, Finland, Norway and Sweden, respectively (8, 11-13). Thus there is a reservoir among injecting drug-users that might be of importance if HCV was spread by sexual contact.

In this study, however, only 2 out of 465 (0.4%) heterosexual STD clinic attenders were found anti-HCV positive without having any known risk factors for parenteral transmission. The same group of patients had an overall prevalence of HBV markers of 15%, being highly dependent on the country of birth, associated with a history of gonorrhoea, but not with the number of sexual partners (9). The 2 patients with HCV antibodies were born in Denmark, had had a relatively high number of lifetime sexual partners and previous STD episodes, one had HBV markers and one was HIV-infected, all indicators of a behaviour increasing the risk of having infectious agents transferred by sexual contact.

An association between the presence of HCV, HBV and HIV has been found (14, 15), though not in all studies (7).

In conclusion, this study suggests that sexual transmission of HCV may occur but that the risk is very low. Therefore, routine screening of STD clinic attenders for HCV antibodies cannot be recommended.

REFERENCES


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Penile Metastases from Bladder Carcinoma

Sir,

Cutaneous metastatic lesions, on the penis are extremely rare (1–3). Typically, they are associated with an advanced stage of the disease and a poor prognosis. A recent review of the literature showed that 75% of the primary tumours are of genitourinary origin, the most frequent site being the bladder (2). However, carcinomas of the gastrointestinal and respiratory tracts, lymphomas and bone tumours have also been reported to metastasize to the penis (2, 4). We describe one additional case of penile metastases arising from bladder carcinoma.

CASE REPORT

A 60-year-old man presented with nodular, non-ulcerated, violaceous lesions on the penis. One year earlier, bladder carcinoma (ST T3b, G3) had been diagnosed and he was treated with total cystectomy. Physical examination revealed pea-sized, hemispherical, firm, asymmetrical nodules, two of which were located on the glans and one on the shaft of the penis (Fig. 1). Inguinal lymph nodes were not enlarged.

Microscopic examination of one of the nodular lesions revealed a dense diffuse infiltrate throughout the entire dermis. Neoplastic cells showed no tendency to epidermotropism. Higher magnification detected cytomorphic features of large cells with eosinophilic cytoplasm and large basophilic nuclei, and foci of squamous metaplasia (Fig. 2). Vascular spaces were extensively infiltrated by neoplastic nests. The mitotic rate was high. Results of immunohistochemical staining (immunoperoxidase technique) with monoclonal antibodies against tissue polypeptide antigen (TPA), pan-cytokeratins (CKs), CK8, CK18 and CK19 were positive. Carcinobryonic antigen reaction was negative.

At this time, the patient complained of progressive weakness, anorexia, lumbar and lower extremities pain. Magnetic nuclear resonance of the spinal backbone showed hypodense, irregular areas located on L2-4, D12 and D11 vertebrae, consistent with a diagnosis of bone metastases. Computed tomographic scans of the chest and abdomen were negative.

Based on clinicopathological findings, a diagnosis of penile metastases was made. The patient died of widespread disease 2 months after our observation. An autopsy was not performed.

DISCUSSION

Clinical features of metastasis to the penis are diffuse penile induration, single or multiple, rarely ulcerated, nodules (2, 3). The lesions usually involve the shaft of the penis; less often, as seen in our patient, they are located on the glans (5–8). Signs and symptoms of penile metastases consist of urinary retention, dysuria, haematuria, priapism and penile pain. The clinical differential diagnosis may include primary tumours of the penis, true priapism, Peyronie's disease, tuberculosis and unspecified inflammatory lesions. In our patient, the past medical history was remarkable for bladder carcinoma.

Urinary bladder tumours are most frequently of epithelial origin. Approximately 93% of the primary bladder cancers

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