

## **Carcinoma of the rectum in male homosexuals<sup>1</sup>**

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**Summary:** Two male homosexuals with carcinomata of the rectum with transitional cell changes are reported, and the possible aetiology of these lesions is discussed.

### **Introduction**

Carcinoma of the rectum accounts for approximately 40% of colonic neoplasms. One-third of these are in the lower rectum and 4% originate from the anus (Goligher 1980); these latter include squamous carcinoma, malignant melanoma and tumours arising from the transitional cell region. Reported here are two patients with carcinoma of the lower rectum who are young male homosexuals. One is bisexual but both are anoreceptive, and although acquainted they are not partners.

### **Case reports**

*Case 1:* A 39-year-old anoreceptive male homosexual presented with a five-month history of bright bleeding per rectum on defaecation. He had suffered from gonococcal and nonspecific proctitis in the past, the latter having been diagnosed histologically two years prior to presentation. On rectal examination a shallow ulcerating tumour was palpable 2cm from the anorectal junction on the posterior wall of the rectum.

*Case 2:* A 36-year-old bisexual male, but homosexually anoreceptive, presented with a six-month history of blood and mucus on defaecation. Gonococcal proctitis had been diagnosed in the past. His father died from carcinoma of the rectum. A low ulcerating tumour was palpable impinging on the anorectal junction on the posterior wall of the rectum.

Histologically both tumours were moderately well differentiated adenocarcinomas with transitional cell changes. Both patients were treated by abdominoperineal excision of the rectum and were found to have Duke's B and C1 tumours respectively. They were alive and well with no sign of a tumour recurrence, the first three years and the second nine months after surgery.

### **Discussion**

Carcinoma of the anus is derived from squamous epithelium and may metastasize to the inguinal lymph nodes. Rectal adenocarcinomas originate in the columnar epithelium, metastasize via mesenteric lymphatics and the portal venous system and spread submucosally. Carcinomas derived from the transitional epithelium, between the squamous and the columnar epithelium, may spread in either direction and include basaloid and epidermoid carcinomas and a mixed variety of transitional and adenocarcinomas, as in the two reported cases.

Cooper *et al.* (1979) recently reported 4 anoreceptive male homosexuals with carcinoma of the anorectal region. These tumours arose from the transitional epithelium between the columnar and squamous epithelia at the anorectal junction. In another group of 260 homosexuals, one anoreceptive male was also found to have a carcinoma of the rectum (Kazal *et al.* 1976).

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It has been suggested that as the female cervix is derived from the same cloacagenic membrane as the transitional cells of the anorectal junction, there might be a common aetiological factor. Stern & Kaplan (1969) noted that in a series of 10 females with carcinoma of the cervix, there was a coexistent anal carcinoma or development of one at a later date.

Carcinoma of the cervix is associated with early experience of sexual intercourse in conjunction with a multiplicity of partners. Male homosexuals are well recognized for promiscuity, many having more than a hundred casual contacts each year.

In the last decade a great deal of attention has been focused upon the significance of herpes simplex virus. Women with carcinoma of the cervix have a higher incidence of clinical and subclinical genital herpetic infections and, indeed, some tumours show the presence of inclusion bodies in the tumour cells and adjacent cervical epithelia on electron microscopy. Homosexuals are known to contract a variety of sexually transmitted viral infections and are frequently exposed to herpetic viruses. We looked for raised antibodies to herpes simplex virus in our patients, but they were not present. Neither were inclusion bodies seen on electron microscopy in the second case.

If a carcinogen or carcinogens are implicated in the aetiology of these tumours, it is possible that the frequency of exposure alone may make homosexuals as likely to develop a cancer as the promiscuous female. The connection between homosexuality and chronic infections or inflammatory disease of the rectum and carcinoma of the rectum may be coincidental, but it is worthy of further investigation especially in the young male with this sort of tumour.

## References

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