THE TREATMENT OF MALIGNANT GROWTHS OF THE MALE URETHRA

A Clinical Report

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That primary carcinoma of the male urethra is a comparatively rare condition is evidenced by the small number of cases reported in the literature. In 1922 Braasch and Scholl[2] published a complete review of the literature up to that date, and reported a case. Since that time additional cases have been reported by Kretschmer[8] in 1923, Culver and Forster[4] in the same year, Christen[3] in 1925, Neuwirt, Bedrna[9] and Peters[10] in 1928. In 1928, additional cases were also reported by Fukai,[6] and in 1929 by Flamm,[5] Bieberbach and Peters,[1] and also Huggins and Curtis,[7] bringing the total number reported in the literature up to 110 cases.

To this number I wish to add three cases which have come under my observation and in which operation has been performed. All three patients are living at the present time without any signs of recurrence, one for nine years, one for eight years, and one for three and one-half years after operation. In one case there was a history of injury to the perineum; in another a history of long standing inflammation of the urethra followed by stricture, and in the third there was also a history of chronic urethral inflammation. In two of the three cases a local resection of the urethra was performed with end-to-end anastomosis. In both of these cases stricture followed; in one case an internal urethrotomy was necessary and the patient still has a rather firm, tight stricture, although he is not greatly inconvenienced. In the other case the urethra is about normal in size with a tendency to narrowing after intervals of six months, if it is not dilated. In neither case, however, is there any evidence of metastasis. In the third case extensive metastases were present in the inguinal glands, and there was extensive urethral involvement. This patient had a double inguinal hernia, and was also a diabetic. A block dissection was done in this third case, in which the penis and urethra anterior to the growth were removed, together with the testes and inguinal glands; the proximal urethra was transplanted into the perineum, and the herniæ were closed. The patient made a good recovery and is free from any evidence of recurrence at the end of three and one-half years.

The pathological diagnoses in these cases were squamous cell carcinoma in the first case, papillary carcinoma in the second case, and adenocarcinoma in the third case. In this last case the growth probably started in some of the glands adjacent to the urethra, but for clinical purposes it may be classified as of the urethra.

It is difficult to make an early diagnosis in these cases. The symptoms are largely those of stricture with attendant abscess formation, and the real cause of the trouble may be overlooked until extension has taken place. If the condition can be recognized early, operation offers very good chance of permanent relief. Our experience has confirmed other reports that carcinomata of the male urethra do not metastasize early. Fistulæ are nearly always present. These tumors occur mainly in the membranous portion of the urethra.

From the history of the cases coming under our observation, traumatism and chronic irritation were the predisposing causes.

The success of the surgical treatment depends upon the stage of the disease at which it is instituted. If the cases can be treated early, while the condition is still localized, the results will be good, as attested by our experience in the three cases described here. In one case there was extensive involvement of the inguinal glands, but we hope the process was checked at this point. Although three and one-half years have elapsed, it is still too early to consider the cure complete. X-ray and radium following excision is to be recommended and may be of benefit. If the case is inoperable, certainly radiation should be employed.

Case Reports

Case 1. The patient was a laborer, fifty-eight years of age. There was nothing in the general history having any bearing on the condition which was present. He gave a history of some sort of injury to the perineum some years previously, which was followed by a rectal fistula. Two years before being admitted to the clinic he had had an acute retention which was caused, he said by a cyst of the urethra. No definite history of this condition could be obtained except that a perineal incision had been made for the relief of retention; this was followed by a fistula.

At the time I saw the patient an acute retention was again present, together with extensive perineal induration, infection, chills and fever. A suprapubic puncture was made for relief of the retention. After the acute symptoms had subsided, and much of the perineal edema had been reduced, an operation was undertaken

for the relief of the stricture. At this time I was not sure that this condition was malignant, although it was unusually hard. The operation consisted in opening the bladder and passing a sound retrograde. At the tip of the sound in the perineum, the urethra was divided, the mass was dissected free and the distal end of the urethra was severed beyond the involved tissue. About 1.5 inches of urethra was resected. By passing a No. 18 catheter from the meatus, an end-to-end anastomosis was made. Convalescence was rather slow, but after a reasonable time the catheter was removed. A small perineal fistula remained, which, however, soon closed. Regular dilatation has been continued, this being necessary now only about twice a year. The patient is in good physical condition, and there is no evidence of recurrence after nine years.

The histological diagnosis in this case was squamous cell carcinoma.

Case 2. This man, forty years of age, gave a history of a gonococcus infection at the age of twenty-two. Eleven years before being admitted to the clinic he had had an acute retention which was relieved by perineal incision. This was followed by a stricture requiring frequent dilatation.

When I saw the patient in 1923 an acute retention was present and I was unable to pass any kind of instrument past the stricture. I relieved the retention by a suprapubic puncture. A very hard, indurated area was found in the perineum. Remembering my experience of a year previous with a similar condition, I made a diagnosis of probable malignancy. A resection was done as in the previous case, and a course of x-ray therapy was given following operation. Union at the point of anastomosis of the ends of the urethra was not very satisfactory and a very tight stricture resulted. An internal urethrotomy was performed two years later, and since then dilatation has been done at regular intervals. There is no evidence of recurrence after eight years.

The histological diagnosis in this case was papillary carcinoma.

Case 3. This man, sixty-one years of age, gave a history of a gonococcus infection at the age of twenty-five. He was admitted to the clinic on account of difficulty in urination. Extensive induration was present in the perineum extending along the entire urethra. The inguinal glands on both sides were involved; a biopsy of a gland showed malignancy. Nothing short of an extensive block dissection seemed worth while. The hazard of such a procedure was explained to the patient and his family; he requested that the operation be performed.

The penis and the testes and inguinal glands on both sides were removed and the urethra was transplanted into the perineum. Bilateral herniæ were present which were easily corrected after the testes and inguinal glands had been removed. The patient was also diabetic, but is no longer handicapped by this condition. After three and one-half years he seems to be perfectly well and there is no evidence of recurrence.

Summary

1. Practically all published reports of cases of malignancy of the male urethra stress the difficulty of an early diagnosis.

2. The condition is often associated with, and resembles the induration of an infection about a stricture.

3. The condition does not produce early metastasis.

4. Operation, even without resection of the inguinal glands, may produce good results.

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