

6-1969

Nodular Excision of Prostatic Carcinoma: Experience with Four Patients

E. E. Steinhardt

A. W. Bohne

Follow this and additional works at: <https://scholarlycommons.henryford.com/hfhmedjournal>



Part of the [Life Sciences Commons](#), [Medical Specialties Commons](#), and the [Public Health Commons](#)

Recommended Citation

Steinhardt, E. E. and Bohne, A. W. (1969) "Nodular Excision of Prostatic Carcinoma: Experience with Four Patients," *Henry Ford Hospital Medical Journal* : Vol. 17 : No. 2 , 135-137.

Available at: <https://scholarlycommons.henryford.com/hfhmedjournal/vol17/iss2/11>

This Article is brought to you for free and open access by Henry Ford Health System Scholarly Commons. It has been accepted for inclusion in Henry Ford Hospital Medical Journal by an authorized editor of Henry Ford Health System Scholarly Commons.

Nodular Excision of Prostatic Carcinoma

Experience with Four Patients

E. E. Steinhardt, M.D.* and A. W. Bohne, M.D.*

It is well-known that carcinoma of the prostate grows slowly for many years, remaining relatively innocuous for a long period. Predicting the lethal potential of the cancerous prostatic nodule is therefore uncertain.

In certain situations, because of this slow growth, it may be possible to consider a somewhat less radical treatment than total removal of the gland. The four cases reported here illustrate these special circumstances—and the technique used.

Our procedure of nodular excision may be appropriate under the following conditions:

1. When the radical operative procedure is not technically feasible for one reason or the other.
2. When the pathological diagnosis on the frozen section is equivocal.
3. When the age and desires of the patient makes the preservation of potency and continence highly desirable.

Background—Prognosis

Gleason's classification¹ of the microscopic cell pattern in prostatic car-

cinoma gives us as accurate a prognosis from the microscopic slide as the urologist can get from the clinical, laboratory and x-ray findings. After classifying the degree of differentiation of prostatic carcinoma into five patterns, he combined these patterns with tumor staging and developed a much improved index for prognosis.

On the other hand, Jewett et al² have been unable to demonstrate the potential biological activity of a cancerous prostatic nodule by any routine histologic technique. Some nodules of low grade cancer grow rapidly and metastasize early; others are dormant for years. In Jewett's series of 86 patients with locally limited prostatic cancer, one third lived 15 years free of the disease after undergoing radical perineal prostatectomy. This was twice the cure rate of those given endocrine treatment.

The well-documented reports of the Veterans Administration Cooperative Urological Research Group³⁻⁶ showed that the median survival time for the

* Division of Urology

Presented at S.E. Branch meeting of American Urological Association at Hollywood, Florida, April 3, 1969.

3,100 patients studied was 3½ years. The most important factor in determining the prognosis in these patients was the high mortality rate from unrelated diseases; 67% of the deaths were from intercurrent diseases.

Barnes⁷ showed that "the 15-year survival of patients with early prostatic carcinoma, who were treated conservatively, is almost the same as it is in similar cases treated by total prostatectomy". The average age of his patients was 66 years.

As Watson^{8, 9} and other investigators^{10, 11} have reported, the prognosis is better in older patients, for whom prostatic cancer seems less lethal.

A finding of perineural invasion seems to have little influence on the outcome. Roden et al¹² demonstrated that the so-called perineural lymphatics have no endothelial lining, and that no lymphatics could be seen in the perineurium with the electron microscope. They concluded that cancer spreads along the nerves in the prostate, within the tissue planes of least resistance, and not in lymphatics.

In the Veterans Research Group, patients who were given estrogens following radical prostatectomy for Stage I and Stage II carcinoma had a lower survival rate than those who were given postoperative placebos. Estrogen therapy increased the risk of death from cardiac and cerebrovascular causes.

Four Case Histories

Four patients between the ages of 50 and 70 years were presented for evaluation and treatment of solitary prostatic nodule. All were essentially asymptomatic, and preoperative studies showed no clinical, biochemical or radiological evidence of extension. They were all classified as Stage I with nodules measuring 0.5 cm, 0.7 cm, 1 cm, and 1.1 cm, respectively.

After open perineal biopsy, the nodule

was electrosurgically excised widely. Surrounding tissue was excised and submitted separately for microscopic examination. The base was then fulgurated.

In one 61-year-old patient, the pathologist reported a well differentiated small gland type of adenocarcinoma surrounded by normal tissue. In another 61-year-old man, the report showed focal nodular areas of adenocarcinoma with perineural lymphatic invasion. In this patient, sections from surrounding prostatic tissue were normal.

Frozen sections from the third patient, 55 years old, were indeterminate. The permanent sections later showed round atypical cells with perineural invasion extending to the resected edge of the specimen.

In the fourth patient, 56 years old, the frozen sections showed no evidence of carcinoma. Permanent sections showed adenocarcinomas without perineural invasion.

Our patients averaged 12 days' stay postoperatively, with an uneventful postoperative course except for a mild urinary tract infection in one patient. All patients were continent and potent. These four patients have been followed for periods up to nine years and are asymptomatic with no treatment other than that described. They did not receive hormones or irradiation therapy, nor was an orchiectomy performed. Current physical examinations on all four show a benign smooth gland. Laboratory studies are normal.

We do not suggest that nodular excision of prostatic carcinoma as practiced by us is an equivalent substitute for radical prostatectomy. The best method for a possible cure still seems to be total surgical removal of the prostate, as originally practiced by Young, later modified by Hudson and Belt, and the procedure developed by Millin and others.^{2, 12-14} The authors' experience with radical prostatectomy in other patients is similar to theirs.

Summary

Four patients, 50 to 70 years of age, each with a solitary prostatic nod-

Nodular Excision of Prostatic Carcinoma

ule but otherwise asymptomatic, were referred for evaluation and treatment. Preoperative studies showed no clinical, biochemical or radiological evidence of extension. They were classified as belonging in Stage I. All underwent open perineal biopsy. At surgery, for one reason or another, a radical prostatectomy was not done. In some, frozen

tissue diagnosis was equivocal and permanent sections later showed definite adenocarcinoma. When radical procedure was not indicated, or could not be completed, the nodule was electro-surgically excised and the base fulgurated. After nine years of followup, these patients show no evidence of recurrence and are asymptomatic.

REFERENCES

1. Gleason, D. F.: Classification of prostatic carcinomas, *Cancer Chemother Rep* 50:125-8, Mar 1966.
2. Jewett, H. J., et al: The palpable nodule of prostatic cancer, *JAMA* 203:403-6, Feb 5, 1968.
3. Carcinoma of the prostate: a continuing co-operative study, Veterans Administration Co-operative Urological Research Group, *J Urol* 91:590-4.
4. Treatment and survival of patients with cancer of the prostate, Veterans Administration Co-operative Urological Research Group, *Surg Gynec Obstet* 124:1011-7, May 1967.
5. Carcinoma of the prostate: treatment comparisons, Veterans Administration Co-operative Urological Research Group, *J Urol* 98:516-22, Oct 1967.
6. Factors in the prognosis of carcinoma of the prostate: a co-operative study, Veterans Administration Co-operative Urological Research Group, *J Urol* 100:59-65, Jul 1968.
7. Barnes, R. W.: Non-operative treatment of operative carcinoma of the prostate, *Proc Nat Cancer Conf*, pp 323-6, 1964.
8. Cook, G. B., and Watson, F. R.: A comparison of age of death rates due to prostatic cancer alone, *J Urol* 100:669-71, Nov 1968.
9. Cook, G. B., and Watson, F. B.: Twenty single nodules of prostate cancer not treated by total prostatectomy, *J Urol* 100:672-4, Nov 1968.
10. Flocks, R. H.: Clinical cancer of the prostate: a study of 4000 cases, *JAMA* 193:559-62, Aug 16, 1965.
11. Rosenberg, S. E.: Is carcinoma of the prostate less serious in older men? *J Amer Geriat Soc* 13:791-8, Sept 1965.
12. Rodin, A. E.; Larsen, D. L.; and Roberts, D. K.: Nature of the perineural space invaded by prostatic carcinoma, *Cancer* 20:1772-9, Oct 1967.
13. Flint, L. D., and Hsiao, J.: Radical prostatectomy for carcinoma: a review and perspective, *Surg Clin N Amer* 47:695-706, Jun 1967.
14. Lilien, O. M., et al: The case for perineal prostatectomy, *J Urol* 99:79-86, Jan 1968.
15. Feeney, M. J., et al: Total perineal prostatectomy for carcinoma, *Calif Med* 106:372-4, May 1967.