Turnbull RB, in discussion, Coleman ST, Eckhert C: Preservation of rectum in familial polyposis of the colon and rectum. AMA Arch Surg 1956; 73:635-653. of the urinary bladder following major pelvic surgery. Brit J Surg 1968; 55:929–933.

- Heald RJ. Presidential Address, Section of Surgery, Royal Society of Medicine, London, October 7, 1987.
- 53. Smith PH, Ballantyne B. The neuroanatomical basis for denervation

## DISCUSSION

DR. RUBEN F. GITTES (La Jolla, California): It is a privilege, indeed, for me to stand here and congratulate Dr. Patrick Walsh on what has to be a very singular combination of original personal research and subsequent technical contributions in the field of pelvic surgery.

It is certainly marvelous to have seen within a 10-year period the elucidation of the anatomy and physiology of penile erection. The anatomy of that area has been dissected; the physiology has been unscrambled.

We have all known for years that dissection around the rectum might or might not impair potency, depending on how wide the dissection is. What happened? How much research was actually carried out to find the relation between that pararectal tissue and the penile function of erection?

In some cases, after radical prostate surgery, the patients claimed to be potent. Other urologists wrote that off as wishful thinking or inadequate cancer surgery. Actually, these cases were exceptions to the rule and were noted by Dr. Patrick Walsh. He turned to intensive studies in the anatomic laboratory with Professor Pieter Donker. They did something that could have been done a hundred years ago but wasn't. Now we are the beneficiaries of it today. It is remarkable and a very useful step forward for us urologists and pelvic surgeons.

I would like to point out that this anatomic knowledge dovetails with our new knowledge of the physiologic mechanisms of erection, which have been elucidated in other laboratories. Today, even if the pelvic nerves are cut, we can promise the patient a very good chance of achieving erections.

You have heard of the use of papaverine self-injections. These are no humbug. A patient who is terribly worried about radical surgery and his future potency can now be reassured—first, that he may have surgery that will spare his nerves, if possible, and second, that if the worst happens, he has recourse to self-injections that restore erectile potency.

I believe that it is nothing short of amazing that we have had this progress. I am here to congratulate Dr. Walsh and to point out to this audience what a great achievement this has been.