Although it has been suggested that early prostate cancer can be followed without treatment, patients with clinically localized prostate cancer are at substantial risk of dying from prostate cancer. Therefore aggressive therapy is usually advocated in patients with a life expectancy of 10 or more years. Radical surgery is one of the curative treatments and can be accomplished via the perineal or the retropubic approach. The radical retropubic approach has enjoyed widespread utilization subsequent to the potency-sparing modification championed by Walsh and Donker in 1982. Additionally, the operation has the advantage of allowing simultaneous pelvic lymphadenectomy. The radical perineal approach is felt to be advantageous based upon the fact that the dorsal venous complex is not disturbed, resulting in a relatively avascular field for dissection. Further it provides good exposure for reconstruction of the vesicourethral anastomosis and results in dependent postoperative drainage. The principle disadvantage is that it does not afford simultaneous exposure of the pelvic lymph nodes, thus requiring a separate incision for pelvic lymphadenectomy. Referring to this, one of the most important questions seems to be: can the pelvic lymph node dissection be omitted in a highly selected patient group? Historically, nodal status was used to define whether the patient was eligible for aggressive local therapy; the presence of positive lymph node metastases disqualified a patient to receive radical prostatectomy that could only be performed with a high morbidity rate. Since surgeons have gained more experience and since detailed anatomical studies of erectile nerves and external urinary sphincter have prepared the way for an operation with a minimal morbidity rate as well as the fact that patients with minimal microscopic nodal metastases treated with radical prostatectomy are destined to have relapses ultimately, but the development of metastases may take 5 - 10 years even with no additional therapy, our strategy in a patient with small nodal metastases is to maintain an aggressive surgical therapy by continuing with the radical prostatectomy. Furthermore several authors have
shown that lymph node metastases can be predicted. Therefore, the current use of presurgical prostate specific antigen levels, histological grading and clinical stage became of special interest. Threshold values, below which only a few patients had metastases, and nomograms and curves with calculated prostate specific antigen values for probability levels of positive pelvic lymph nodes by clinical stage and biopsy grade have been developed to predict nodal disease. We have calculated a metastatic risk of 3.5% in patients with a well differentiated prostate cancer and a PSA value of less than 10 ng/ml. In those "low risk" patients radical perineal prostatectomy can be performed without node dissection.

In extracapsular tumors, radical prostatectomy will often not succeed in achieving complete tumor excision. The patient are expected to have substantial local recurrence rate and most of them will finally progress systematically. Still, it seems that a subgroup of patients with locally extensive prostate cancer will have long-term benefit from radical prostatectomy. Firstly, a wide resection of the neurovascular bundles can result in specimen-confined, margin-negative radical prostatectomy and secondly, even when progression does occur, it will be systemic progression: the local problems related to invasion of the bladder, urethra, ureters and the rectum will not occur, thus giving the patient a real advantage in terms of a better quality of life.