PREDICTORS OF PARTIAL NEPHRECTOMY UTILIZATION AND INEQUITIES OF CARE IN THE TREATMENT OF RENAL CELL CARCINOMA IN CANADA

Focus Area: Kidney Cancer  
Research Type: Clinical  
Funding Source: Canadian Cancer Society

Description:  
Compared to radical nephrectomy (RN), partial nephrectomy (PN) leads to improved renal function preservation. However, PN may be infrequently utilized in the treatment of renal masses, particularly in patients susceptible to chronic kidney disease, such as patients with diabetes mellitus (DM), hypertension (HTN), and the elderly. Yet these groups of patients have the most to benefit from renal preservation surgery.

We conducted a population-based, retrospective, observational study using the Canadian Institute for Health Information Discharge Abstract Database. All patients treated for a renal mass with either RN or PN from April 1, 1998 to March 31, 2008 were included in the analysis. Using descriptive statistics and multivariable regression modelling, we demonstrated low uptake of PN (17.5% overall); year, age, geographic region, Charlson score, hospital volume, and physician volume were independently associated with PN use, whereas DM, HTN and income quintile were not.

In this contemporary analysis PN continues to be underutilized, and the rate of PN in DM, HTN and the elderly was less than expected given their known relationship to chronic renal failure.

IMAGE-GUIDED FOCAL THERAPY FOR THE TREATMENT OF PROSTATE CANCER

Focus Area: Prostate Cancer  
Research Type: Clinical

Description: Focal therapy offers the opportunity of reducing treatment-related side effects compared with traditional radical therapy. The use of MRI guidance allows us to accurately deliver the therapy and monitor the destruction of the target lesion in real time. This would be offered to patients who would otherwise be candidates for active surveillance (AS). A concern with AS is the small but real possibility of progression to incurable disease.

Side effects of prostate cancer treatment, such urinary incontinence and erectile dysfunction, can lead to a significant impact on patient's quality of life. Our goal is to avoid/minimize these effects by focusing treatment on the cancerous lesion, rather than the entire prostate gland.

This can be viewed as a “male lumpectomy,” analogous to the breast lumpectomies for breast cancer in women.