

Characteristics of lymphoedema, in particular midline lymphoedema, after treatment for prostate cancer: a retrospective study

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Introduction: After treatment for prostate cancer, patients may develop secondary lymphoedema of the leg(s) and/ or genital (midline) region. A recent systematic review shows a broad range of prevalence rates of 18% - 29% for leg lymphoedema and of 2% - 22% for genital lymphoedema. Although it is well known that lymphoedema, more specifically genital lymphoedema, has a substantial impact on a patient's quality of life, diagnosis of this lymphoedema is often delayed or missed. Knowing the characteristics of patients with genital lymphoedema developed after treatment of prostate cancer is of utmost importance to detect the genital lymphoedema as early as possible. Aims of study: to describe the characteristics of men with lymphoedema after treatment for prostate cancer and more specifically to compare the characteristics of patients with leg and genital lymphoedema and patients with only leg lymphoedema.

Method: Retrospective data of 109 men who presented for consultation at the centre for lymphoedema of the University Hospitals Leuven with lymphoedema developed after treatment for prostate cancer is analysed. First, a global overview of this study population is provided by describing patient-, lymphoedema- and cancer treatment-related variables. Second, characteristics of patients with leg and genital lymphoedema are compared with these of patients only with leg lymphoedema. The comparison was done by means of univariable analyses followed by multivariable analyses.

Results: The mean age of the patients with lymphoedema is 68 ($\pm 7,3$) years and mean BMI is 27,6 ($\pm 3,9$) kg/m². Median duration of lymphoedema before the first consultation in the centre for lymphoedema is 22,2 (8,4; 42,4) months. Based on univariable analyses, patients with leg and genital lymphoedema have more frequently upper leg lymphoedema (88,6% vs 68,9%, $p=0,026$), have more frequently skin fibrosis (34,3% vs 16,2%, $p=0,034$) and had more often lymphatic reconstructive surgery (8,6% vs 0,0%, $p=0,020$) than patients only with leg lymphoedema. Moreover, patients with leg and genital lymphoedema report less lower leg lymphoedema (77,1% vs 94,6%), $p=0,007$) and less wounds (0,0% vs 8,1%, $p=0,029$).

The multivariable analyses still have to be performed but will be discussed during the presentation.

Conclusions: The preliminary results of this study indicate that upper leg lymphoedema, skin fibrosis and lymphatic reconstructive surgery are more often seen in patients with genital lymphoedema. If these characteristics are seen in patients with lymphoedema developed after prostate cancer, possible presence of genital lymphoedema should be taken into account and should also be evaluated.