

MEETING ABSTRACT

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# Prevention and surgical treatment of lymphatic injuries in geriatric surgery

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## Background

The rate of occurrence of post-operative complications after inguinal lymphadenectomy reported in Literature is of 6-40% for seromas or lymphocele, 2-4% for haematomas, 17-65% for wound dehiscence, 6-20% for wound infection and 22-80% for lymphoedema (1-3)

The problem of prevention of lymphatic injuries in geriatric surgery is extremely important if we think about the frequency of both early complications such as lymphorrhoea, lymphocele, wound dehiscence and infections and late complications such as lymphangites and lymphedema. Nowadays, it is possible to identify patients at risk and prevent these lesions or treat them at an early stage. This study helps to demonstrate how important it is to integrate diagnostic and clinical findings in order to better understand how to properly identify patients at risk of lymphatic injuries and, therefore, when it is useful and proper to use prevention.

## Material and methods

The authors' experience includes 85 geriatric patients who underwent procedures to prevent and/or treat lymphatic injuries after trauma or surgery. The main causes of secondary lymphatic injuries are represented by surgical operations, irradiations, infections, traumas, metastatic lymphnodal involvement. The high risk surgical operations include: radical mastectomy, Wertheim-Meigs operation, oncologic operation in urology, abdominal surgery, lymphadenectomies in "critical sites" (groin and axilla). Other operations are represented by exeresis of lipomas in critical sites, saphenectomy, inguino-crural hernioplasty. Authors report their experiences in the prevention and treatment of lymphatic injuries after surgical operations and trauma in geriatrics. After an accurate diagnostic approach (also

lymphoscintigraphy), prevention is based on different technical procedures among which microsurgical procedures. It is very important to follow-up the patient not only clinically but also by lymphoscintigraphy.

## Results

A protocol of prevention was identified of secondary limb lymphedema that included, from the diagnostic point of view, lymphoscintigraphy and, as concerns therapy, it also recognized the role of early microsurgery. It is necessary to accurately follow-up the patient who has undergone an operation at risk for the appearance of lymphatic complications especially in geriatric age and, even better, to assess clinically and by lymphoscintigraphy the patient before surgical operation.

## Conclusions

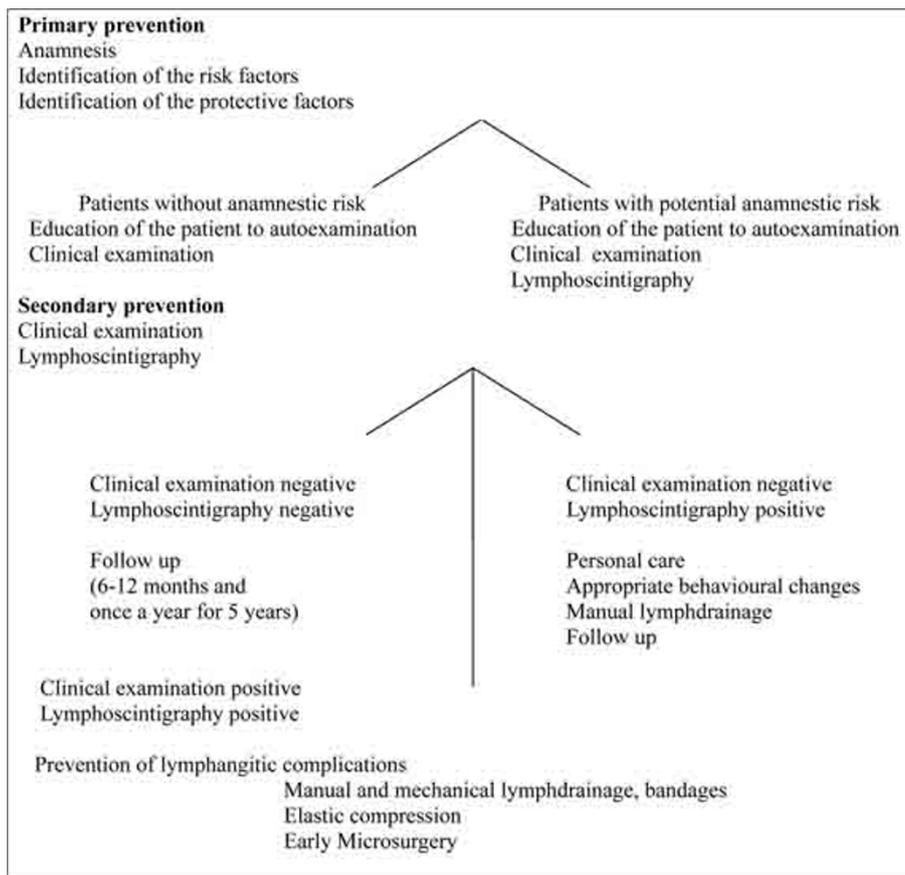
Authors' proposal of prevention and early treatment of secondary lymphatic injuries (Figure 1) might, therefore, be applied by all different specialists (general surgeons, urologists, gynaecologists, oncologists, radiotherapists) during their daily clinical activity to try to get to the aim of preventing the patients, especially in geriatrics, who undergo "risk" operations, from also fighting against complex lymphatic acquired disorders such as lymphorrhoea, lymphocele, lymphedema, besides their already more or less serious primary pathological condition.

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**Figure 1**

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