



## Clinical images

**Elephant leg after treatment for endometrial cancer**Joana Moreira-Barros<sup>a</sup>, Kuan-Gen Huang<sup>b, c, \*</sup>, Tsung-Hsun Tsai<sup>b</sup><sup>a</sup> Department of Obstetrics and Gynecology, Hospital Pedro Hispano, Matosinhos, Portugal<sup>b</sup> Department of Obstetrics and Gynecology, Chang Gung Memorial Hospital, Linkou Medical Center, Taiwan<sup>c</sup> Chang Gung University College of Medicine, Taiwan

## ARTICLE INFO

## Article history:

Received 5 April 2017

Received in revised form

4 May 2017

Accepted 1 June 2017

Available online 24 June 2017

A 68 years-old patient, diabetic and history of endometrial cancer stage IB, managed with hysterectomy, bilateral pelvic lymphadenectomy and radiation therapy 12 years before, presented at the Emergency Department with fever and progressive left leg pain and swelling for 4 days. The patient referred chronic venous stasis and lymphedema since endometrial cancer surgery. Physical examination of the lower extremities showed bilateral edema, more marked on the left, which had also chronic changes of dependent edema, like hyperkeratosis, papillomatous plaques and cobblestone-like nodules, along with more acute changes that included erythema, heat and tenderness, resembling an “elephant leg” (see Fig. 1). The patient was admitted with the diagnosis of left leg lymphedema with secondary infection/cellulitis, treated with antibiotics (culture positive for *Acinetobacter lwoffii*).

The term *elephantiasis* is used to describe a body part that becomes enlarged and disfigured due to edema and fibrosis of the skin. Several conditions that block lymphatic drainage can induce lymphedema, including tumors, trauma, radiation therapy, congestive heart failure, chronic venous stasis, obesity, hypothyroidism, and filarial infection. *Elephantiasis nostras verrucosa* is a rare and exaggerated form of secondary nonfilarial lymphedema.<sup>1,2</sup>

Surgical lymphadenectomy and radiation are common components of therapy for women with endometrial cancer and are

thought to increase the risk of developing lower-extremity lymphedema. According to literature, the risk increases with the number and positivity of the lymph nodes dissected.<sup>3,4</sup> These patients may also have comorbid conditions such as obesity and diabetes that further increase the risk. Once present, the symptoms and local effects of lymphedema cannot be cured, only managed.<sup>3,5</sup> Some suggested strategies to prevent lymphedema formation include omission of lymphadenectomy in low risk patients; sentinel lymph node mapping - although long-term assessments are needed to demonstrate reduction of lymphedema in these patients -, and preservation of the distal most external iliac lymph node at the circumflex vein.<sup>5</sup> The evidence on lower extremity lymphedema treatment and its efficacy is not yet robust.<sup>4</sup> Initial therapy should be directed at relieving lymphedema with massage, compression stockings and multilayer inelastic lymphedema bandaging, after controlling of any infection and confirming adequate vascular perfusion. Decongestive lymphatic therapy, a form of complex physical therapy, and external sequential pneumatic compression devices, have also been applied. Pharmacological intervention with oral or topical retinoids has been successfully employed and can be added to physiotherapy. Surgical interventions, such as lymphaticovenular anastomosis or muscle flap



**Fig. 1.** Bilateral lower limb edema, more evident on the left, with chronic and some acute changes, resembling an “elephant leg”.

Conflict of interest: The authors have no conflicts of interest relevant to this article.

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<http://dx.doi.org/10.1016/j.gmit.2017.06.001>

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transfer, have been used in most difficult and refractory cases of obstructive lymphedema.<sup>1,4</sup> Hence, the resulting disability related to chronic lymphedema may lead to severe lifelong morbidity, including pain, skin breakdown and infection, impaired mobility, difficulties in self-care, psychosocial morbidity and impaired quality-of-life.<sup>3,5</sup>

#### Acknowledgments

We would like to acknowledge Chien-Hsiang Kao, medical student from Chang Gung University, for collecting clinical information for this article.

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