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A Case Report

Rare massive lymphedema of lower limbs in a survivor of endometrial malignancy

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Abstract
Lymphedema of lower limbs is an unfortunate after-effect following treatment in gynaecological malignancies. Its chronicity and irreversibility affects multiple quality of life metrics of the convalescent. Published incidence ranges from 1.2% to 47%. In this article we discuss a rare case of massive lymphedema in a patient following treatment of uterine malignancy with a strong impact on her quality of life.

Introduction

Lymphedema is a common complication following treatment of endometrial cancer. Though massive lymphedema hindering patient's quality of life significantly is rarely seen. It is a chronic complex condition defined as accumulation of interstitial fluid, leading to soft tissue swelling, chronic inflammation, reactive tissue fibrosis with abnormal adipose tissue deposition. Its incidence following treatment of gynaecological malignancy varies based on the surgical procedure performed and the additional therapies followed. In particular when pelvic and para-aortic lymph node dissection is combined with radiation therapy.

Case presentation

She is now a 40-year-old nulliparous lady, she was healthy before she was diagnosed with an adeno carcinoma of uterus with more than 50% of myometrial invasion (Figo stage 1B) at 34 years of age. She underwent total abdominal hysterectomy, B/L salpingo-oophorectomy, infracolic omentectomy and pelvic lymph node dissection. With the given histology and Figo stage of her malignancy she was offered with adjuvant chemo radiotherapy. She had developed B/L lower limb oedema within one year post treatment which gradually worsened with time. She was initially managed with physical exercise and compression bandages to which no good response was seen. With gradual worsening of the edema, she has undergone lipo-reduction surgery by means of excision and liposuction under the care of plastic surgeons. Though some improvement seen condition had worsened with her struggle in getting hold of appropriately sized compression garments added to of loss of follow up during covid 19 pandemic. At present she is at an obnoxious situation, with a chronic lower limb wound adding a further burden. With the massive, deformed appearance of her lower limbs with very severe lymphedema her quality of life being struck in all aspects, her physical activities, mobility drawn back, social interactions, sexual interactions are no more, her economy is at put at risk together with rising expenses for her care and she is psychologically collapsed.

Discussion

At 34years of age she had no place for fertility sparing treatment following diagnosis of stage 1B endometrial cancer. She underwent total hysterectomy combined with B/L salpingo oophorectomy, infracolic omentectomy and pelvic lymph node dissection due to presence of Grade 3 histology, which justifies her surgical management and her post operative adjuvant chemo radiotherapy. Lymphedema is a known unfortunate complication following endometrial cancer treatment, in severe forms every domain of quality of life (QoL) is affected. In addition to lack of survival benefits it adds up to higher cost of care and morbidity. Risk factors for lymphedema include anatomy of regional lymphatic's, presence of alternate pathways of lymphatic drainage, surgical aggressiveness, number of nodes removed, adjuvant radiotherapy and patient characteristics (age, comorbidities, BMI). Gynaecologists should be vigilant not only to identify, but also to ensure follow up, to provide an intensive therapeutic strategy to minimize progression of lymphedema in order to enhance patient's quality of life.

Conclusion

Lymphadenectomy remains the principal cause of lymphedema of lower limbs. True prevalence of condition unknown. It strongly impacts QoL with poor response to treatment efforts. Evidence based selection of patients that could benefit from lymphadenectomy is strongly advocated. Prior patient education of the complication and special attention once diagnosed must be paid in order to minimize its impact.

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Key words: massive lymphedema, endometrial carcinoma, quality of life

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