

Prevention of vaginal stenosis and quality of life in women submitted to pelvic Radiotherapy and Brachytherapy preliminary results.



Pimenta, Ana 1; Leite, Rita 1; Mota, António1; Fortunato. Maria 1; Guiomar, Teresa1; Santos, Filomena1; Alves, Vânia1; Guedes, Filipe1; Roldão, Margarida 1 <sup>1</sup>Serviço de Radioterapia, Instituto Português de Oncologia de Lisboa Francisco Gentil.

Introduction: Pelvic Radiotherapy and Brachytherapy play a fundamental role in the treatment of gynecologic malignancies. These treatments are not exempt of toxicities. Vaginal stenosis develops in up to 88% of patients, compromising their sexual activity, quality of life and clinical surveillance. Therefore, the need to prevent this condition is evident.

Objective: Present the preliminary data of vaginal stenosis prevention methods, and quality of life of patients.

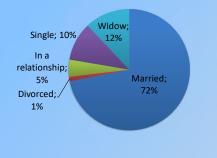
Methods: Retrospective analysis of 89 patients with **Gynecologic** tumors, submitted Radiotherapy to (IMRT/3DCRT) and/or Brachytherapy (3D, guided by CT, HDR), between 2011-2012, proposed to prevent vaginal stenosis.

Prevention started 2 weeks after the end of Radiotherapy, using one or more of the following vaginal techniques: dilator (Fig.1), modified Nunns' technique, or sexual intercourse, according to patient's preference.



Figure 1 – Set of Vaginal **Dilators** 

Results: 43% of patients had cervical tumors. With an average age of 59 (26-80), 88% underwent pelvic Radiotherapy, and 97% Brachytherapy.

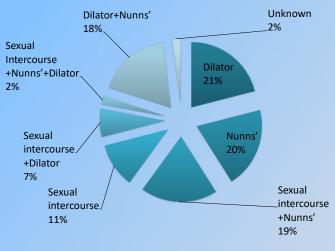


50% 40% No 30% Yes 20% 10% 0%

Graphic 1 - Marital Status

Graphic 2 - Sexual activity before onset of treatments

Compliance to the selected method was 86%, and the most used were: dilator (21%), modified Nunns' technique (19%), and modified Nunn's technique combined with sexual intercourse (19%) (Graphic 3).



Graphic 3 - Selected methods

27% of patients performed prevention 3 times/week. Dyspareunia ocurred in 33%. One-year overall survival was 96%, and disease free-survival 78%. No patient had significant vaginal stenosis.

Conclusions: Given the short follow-up time, it is not yet possible to evaluate the efficacy in preventing vaginal stenosis. An excellent compliance was obtained. With the continuing practice of these methods, it is our aim to continue to analyse their efficacy in the prevention of vaginal stenosis, and their contribution to the patients' quality of life.

## 60%

Bibliography:

- Hartman et al; "Vaginal Stenosis Following Irradiation Therapy for 1. Carcinoma of the Cervix Uteri"; Cancer, August 1972.
- Wolf, J.; "Prevention and treatment of vaginal stenosis resulting from 2. pelvic radiation therapy"; Community Oncology, Vol.3, Number 10, October 2006
- 3. The Cochrane Collaboration; "Vaginal dilator therapy for women receiving pelvic radiotherapy (Review)"; The Cochrane Library 2010, Issue 9.
- Leibel et al, "Leibel and Phillips Textbook of Radiation Oncology: 4. Expert Consult - Online and Print", Third Edition, Saunders, 2010.
- 5. Perez et al, "Perez and Brady's Principles and Practice of Radiation Oncology", Fifth Edition, Lippincott, Williams and Wilkins, 2007.