GRELL
Mont Saint-Michel, NORMANDY
31st MAY - 2nd JUNE 2023
Registres des Cancers général de la Manche, général du Calvados, digestif du Calvados et des hémopathies malignes de Basse-Normandie

CERVICAL CANCER: FROM EPIDEMIOLOGY TO TREATMENT OUTCOMES

Sara Muller[1] Pedro Berenguer[1] Cláudia Fraga[1] Rubina Teixeira[2] Patrícia Serrão[1] Carolina Camacho[1]

[1] RO-RAM – Registo Oncológico da Região Autónoma da Madeira, Hospital Dr. Nélio Mendonça, SESARAM, EPERAM, Avenida Luís de Camões nº 57, 9004-514 Funchal, Portugal

[2] Clínica de Radioncologia da Madeira, Joaquim Chaves Saúde, Rua de Santa Rita nº17, 9000-772 Funchal, Portugal

Introduction

Worldwide, cervical cancer (CC) was the most common gynecological malignancy and remains one of the leading causes of cancer death among women, in 2020.

Cancer screening programs allows its early detection, more effective treatments and better overall survival (OS). Presently, CC screening in the Autonomous Region of Madeira (RAM) is opportunistic.

Recommended treatment includes exclusive chemoradiotherapy (CRT), CRT and brachytherapy (BT), or radiotherapy-alone (RT), and surgery followed by adjuvancy.

Objetives

The aim of this study was a demographic and clinical characterization of the population diagnosed with CC between 2011 and 2020 in RAM and the outcomes of the treatments (2009-2020) in locally advanced disease (LAD), according to the FIGO classification by the National Consensus 2020.

Methods

CC cases were obtained from the National Cancer Registry (RON) database platform.

Kaplan-Meier method was used for OS and disease free-survival (DFS). Log-rank test was used for groups comparison).

Conclusion

Incidence had variations over the last decade in the RAM. Although, in 2020, the world standardized incidence rate (ASR) of CC in RAM (3.64) was lower compared to the incidence rate verified in Southern Europe (7.7) and worldwide (13.3), the number of metastatic and LAD is still high. We found that DFS and OS are higher in patients with CC undergoing multimodal treatment with CRT and BT compared to patients who only underwent CRT, accordingly to bibliography.

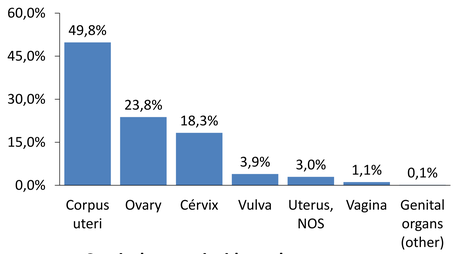
References

1. Bhatla N, et al. Cancer of the cervix uteri: 2021 update. Int J Gynaecol Obstet. 2021 Oct;155 Suppl 1(Suppl 1):28-44. doi: 10.1002/ijgo.13865.
2. Bentahila R, et al. Providing Patients with Locally Advanced Cervical Cancer Access to Brachytherapy: Experience from a Referral Network for Women Treated in Overseas France. Cancers (Basel). 2022 Jun 14;14(12):2935. doi: 10.3390/cancers14122935.
3. Mayadev JS, et al. Global challenges of radiotherapy for the treatment of locally advanced cervical cancer. Int J Gynecol Cancer. 2022 Mar;32(3):436-445. doi: 10.1136/ijgc-2021-003001.
4. Sung, Hyuna, et al. Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA: a cancer journal for clinicians 71.3 (2021): 209-249. doi: 10.3322/caac.21660.

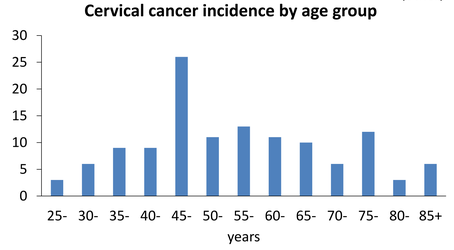
Results

For the epidemiological study it were considered 125 cases with diagnosis between 2011-2020. CC was the 3rd most incident gynecological cancer in RAM, preceded by corpus uteri and ovarian cancers. The tumors were squamous cells (72%), adenocarcinoma (20%) and unspecified morphology (8%).

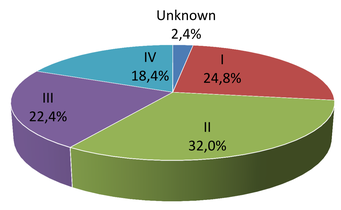
Gynecological tumours (2011-2020 RAM)



Cervical cancer incidence by age group



Stage at diagnosis



For treatment study it were considered 148 new cases of CC diagnosed between 2009 and 2020, with a median age of 54 years (IQR=68-45). 45 cases were diagnosed as local disease, 82 as LAD and 17 cases as metastatic disease.

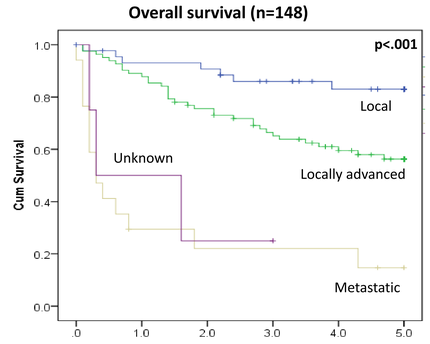
Characterization of the CC population (2009-2020)

Description	n
Total	148
Age (years, median)	54 (45-68)
Total LAD	82 (55.4%)
Age (years, median)	56 (46-68)
Stage at diagnosis	
IB3	3 (3.7%)
IIA2	3 (3.7%)
IIB	37 (45.1%)
IIIA	5 (6.1%)
IIIB	8 (9.8%)
IIIC	17 (20.7%)
IVA	9 (11%)
Treatment	
CRT + BT	32 (39%)
CRT	30 (36.6%)
RT alone	4 (4.9%)
Adjuvant CRT + BT	5 (6.1%)
Adjuvant CRT	2 (2.4%)
Other	6 (7.3%)
Without treatment	3 (3.7%)
Status after treatment	
Complete response	58 (70.7%)
Tumor persistence	23 (28%)
Unknown	1 (1.2%)
Follow-up (cut-off at 31-08-2022 or 60 months)	
Without disease	43 (52.4%)
Local recurrence	3 (3.7%)
Distant recurrence	9 (11%)
Local and distant recurrence	3 (3.7%)
Tumor persistence	23 (28%)
Unknown	1 (1.2%)

Survival rate by stage

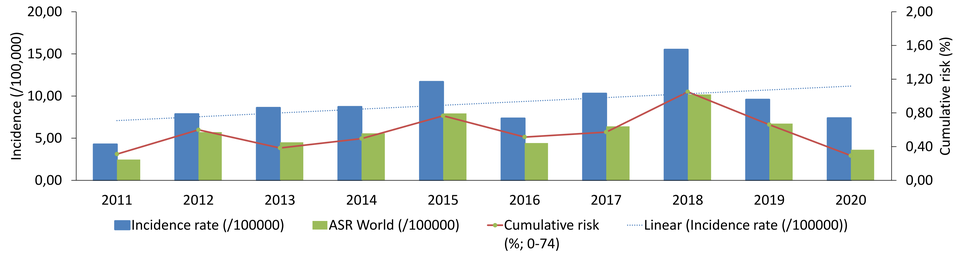
OS	Survival rate(%) 1 year	3 years	5 years	n (deaths)	P value
Stage group FIGO (n=148)					
Local	93.1%	86.0%	83.0%	45 (7)	<.01
Locally advanced	87.8%	65.2%	56.3%	82 (34)	
Metastatic	29.4%	22.1%	14.7%	17 (14)	

Overall survival (n=148)



Regarding LAD, 39% underwent CRT and BT, and 36.6% CRT alone. 70.7% had complete response and 28% had tumor persistence. At 60 months of follow-up 52.4% still had no evidence of disease and 17.4% had local or/and distant recurrence. In patients with LAD, 5-year OS was 56.3% (67.3% for CRT and BT, and 54.5% for CRT, p>.05) and DFS was 51.9% (64.4% for CRT and BT and 36.8% for CRT, p=.014).

Incidence rate, ASR World and cumulative risk 0-74 years



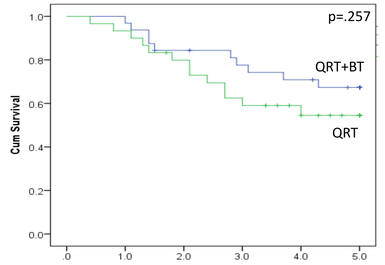
Overall survival

(n=82)		OS (%) 1 year	3 years	5 years	n (deaths)	P value
Stage (FIGO)	**IB3**	100.0%	100.0%	100.0%	3 (0)	.058
	IIA2	100.0%	33.3%	33.3%	3 (2)	
	IIB	97.3%	77.6%	70.6%	37 (10)	
	IIIA	80.0%	80.0%	40.0%	5 (3)	
	IIIB	62.5%	37.5%	37.5%	8 (5)	
	IIIC	76.5%	47.1%	40.3%	17 (10)	
	IVA	88.9%	62.2%	41.5%	9 (4)	

Disease free-survival

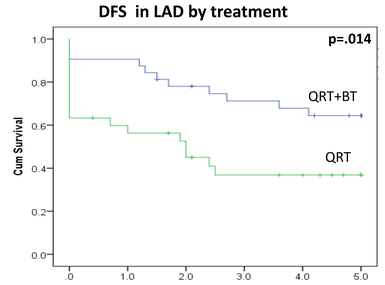
(n=82)		DFS(%) 1 year	3 years	5 years	n (recurrence)	p value
LAD		69.4%	54.9%	51.9%	82 (38)	
Stage (FIGO)	IB3	100.0%	100.0%	100.0%	3 (0)	.044
	IIA2	100.0%	33.3%	33.3%	3 (2)	
	IIB	97.3%	77.6%	70.6%	37 (12)	
	IIIA	80.0%	80.0%	40.0%	5 (4)	
	IIIB	62.5%	37.5%	37.5%	8 (4)	
	IIIC	76.5%	47.1%	40.3%	17 (10)	
	IVA	88.9%	62.2%	41.5%	9 (6)	

OS in LAD by treatment



(n=62)	OS (%) 1 year	3 years	5 years	n (deaths)	P value
QRT+BT	96.9%	77.6%	67.3%	32(10)	.257
QRT	93.3%	59.0%	54.5%	30(13)	

DFS in LAD by treatment



(n=62)	DFS (%) 1 year	3 years	5 years	n (recurrence)	p value
QRT+BT	90.6%	71.2%	64.4%	32 (11)	**.014**
QRT	56.3%	36.8%	36.8%	30 (18)	