

Clinico-pathological features and outcomes of ovarian carcinosarcoma in South-West Wales

Ganiy Opeyemi Abdulrahman Jnr*, Nagindra Das, Kerry Lutchman Singh

Swansea Gynaecological Oncology Centre, Swansea Bay University Health Board, Swansea SA2 8QA, United Kingdom

*Presenting/Corresponding author

Introduction

- Carcinosarcoma of the ovary (also known as malignant mixed mesodermal tumour) is a rare ovarian malignancy with poor prognosis.
- It comprises 1-4% of ovarian malignancies.¹
- Most women would present with advanced stage disease.^{2,3}
- Ovarian carcinosarcoma is a biphasic carcinomatous–sarcomatous tumour with unclear aetiology.⁴
- Optimal treatment modality of this aggressive malignancy remains debatable.

Objectives

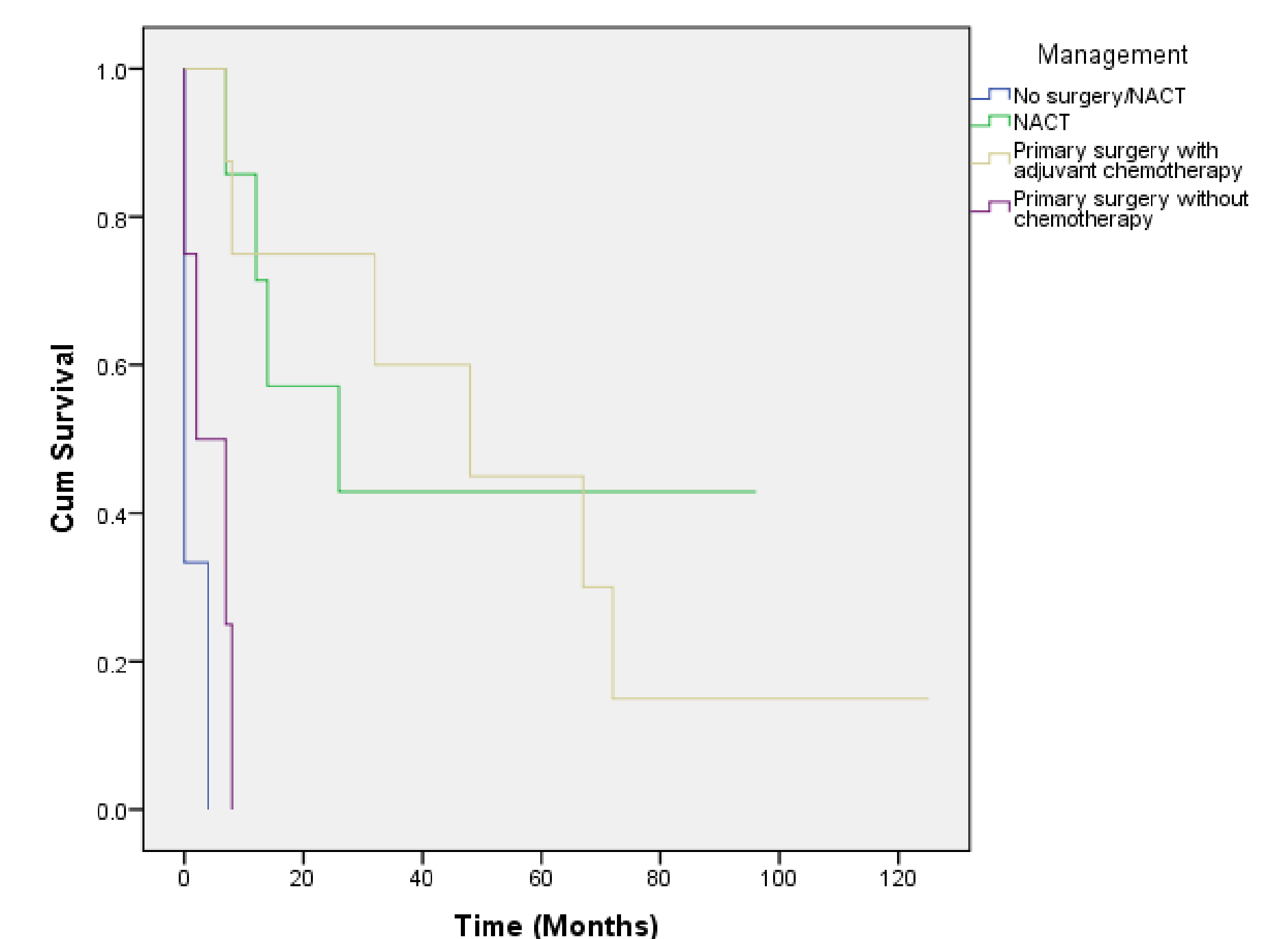
To determine the histological characteristics, optimal management, prognostic factors and survival outcomes of this rare ovarian tumour.

Methodology

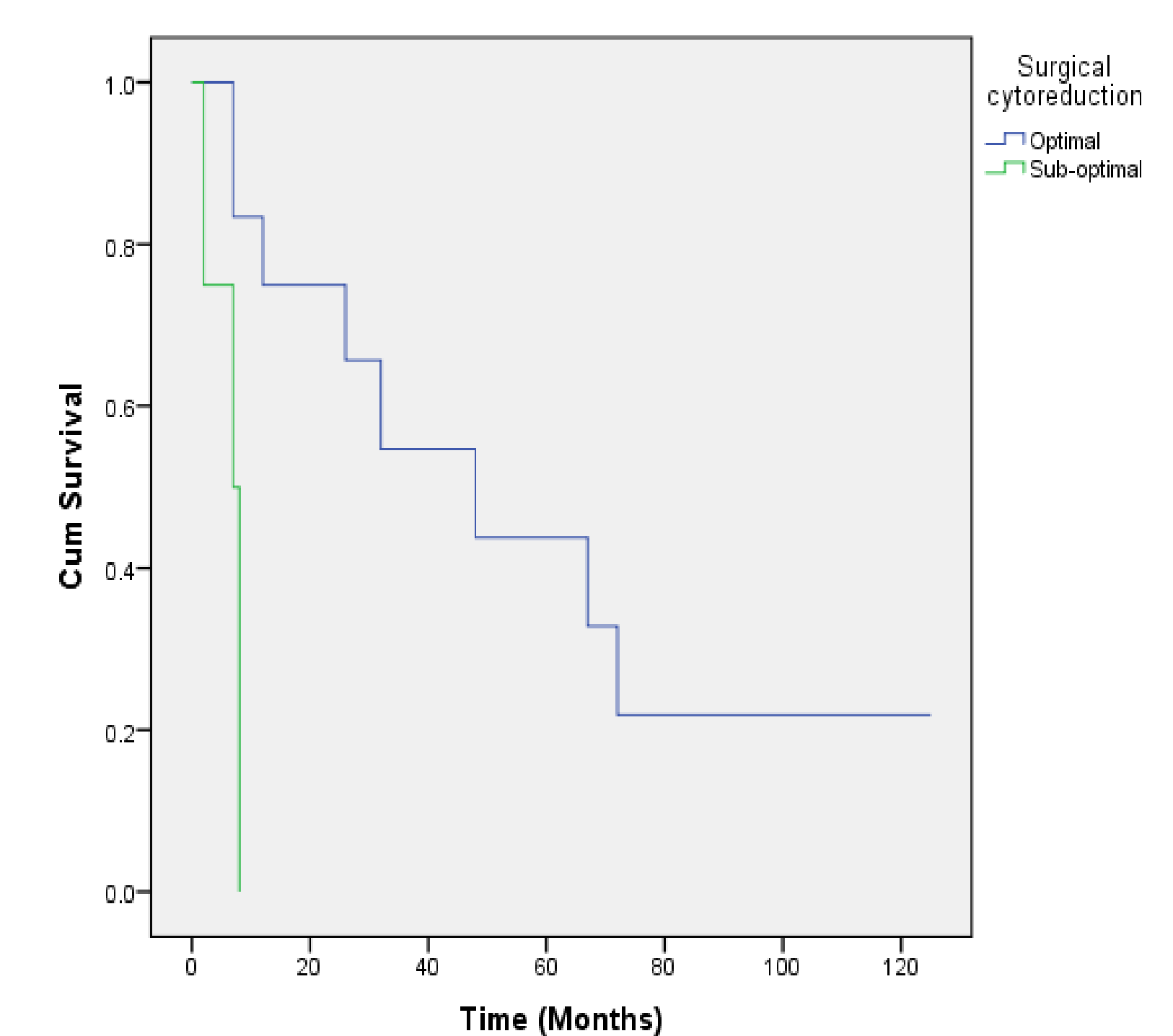
- Retrospective cohort study of women diagnosed with ovarian carcinosarcoma between February 2004 and January 2019 at Swansea Gynaecological Oncology Centre in Wales, United Kingdom.
- Women were identified from our prospective cancer database and information was collected from electronic records of blood results, Multidisciplinary Team (MDT) discussion, clinic letters, operative notes and histology reports.
- Statistical analyses were performed with IBM SPSS 21.0 (SPSS Inc, Chicago, IL, USA).
- A p-value of <0.05 was considered statistically significant.

Results

- 23 women were diagnosed with ovarian carcinosarcoma during the study period.
- The mean age was 66.3 years (median = 68 years, range 42 – 84 years).
- 4 patients each had Stage I and Stage II diseases.
- 11 patients were diagnosed with Stage III disease and 3 patients had Stage IV disease.
- Mean follow-up period was 33.57 months.
- Mean CA-125 was 666.3 kU/L.
- Median overall survival (OS) was 14 months (mean = 41.42 months).
- Of the 20 women that underwent surgery, optimal cytoreduction was achieved in 13 women while 7 women had suboptimal cytoreduction.
- Surgical cytoreduction was a determinant of survival as women who were optimally debulked had a median OS of 48 months while women who had suboptimal cytoreduction had a median OS of 7 months ($p=0.002$).
- Women who could not undergo surgery or neoadjuvant chemotherapy (NACT) had a median OS of less than 1 month.
- The commonest epithelial component observed on histology was serous (15/23 women).
- Primary debulking surgery followed by adjuvant chemotherapy was associated with improved median survival of 48 months compared with women that had NACT who had a median survival of 26 months ($p<0.001$).



Primary surgery with adjuvant chemotherapy is the optimal management of ovarian carcinosarcoma ($p<0.001$).



Surgical cytoreduction was a determinant of survival in ovarian carcinosarcoma ($p=0.002$).

Conclusion

- Ovarian carcinosarcoma is an aggressive malignancy with poor prognosis.
- Surgical cytoreduction was a statistically significant prognostic predictor of ovarian carcinosarcoma.
- Although studies have demonstrated the non-inferiority of NACT in epithelial ovarian cancer, primary cytoreductive surgery with adjuvant chemotherapy was associated with significantly improved survival compared with NACT in women with ovarian carcinosarcoma.

References

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