Older Testicular Cancers in East Yorkshire and North Lincolnshire

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1) Background

- The incidence of testicular cancer in the elderly at the age of 60 years and above is relatively rare.
- Most testicular cancer cases occur in men between the ages of 20 and 39, and the incidence risk decreases with age (1).

2) Methods

Case records of testicular cancer patients who attended outpatient clinics between August 2022 and November 2022 at the Queens Cancer Centre (Cottingham) were reviewed.

Patients aged 50 and above at time of diagnosis were identified and included in the sample.

Each patient's histological diagnosis, stage, management and outcome were collected, analysed and tabulated.

3) Results

- Of the 121 cases of testicular cancer patients reviewed, 26 were 50 years or older at the time of diagnosis.
- Median age at diagnosis was 53.5 years (51-75). **Seven patients** (see table 1) were **diagnosed above 60 years of age** (median 70; 63-75).
- Twenty-three had stage I while 3 had stage II. These patients were followed up for a median of 41 months (3.8-72.1).
- Classic seminoma (n=16; 62%) was the predominant pathology followed by: Mixed Germ cell tumour (n=5), Sertoli-Leydig cell tumour (n=4) and Spermatocytic seminoma (n=1). One patient had synchronous perianal sarcoma.
- Active surveillance was offered to most patients (n=14) based on their stage and risk characteristics. Eight patients received single agent carboplatin and 2 received BEP chemotherapy at the time of diagnosis (see table 2).
- All patients were alive at the time of data collection (February 2023) and only 2 had cancer recurrences.

Age at diagnosis (years)	Median follow up (months)	Diagnosis	Stage (AJCC)	Treatment
63	41.0	Classic seminoma	I	Single agent carboplatin
64	51.5	Classic seminoma	I	Active surveillance
65	45.3	Sertoli-Leydig cell tumour	I	Active surveillance
70	61.0	Mixed germ cell	I	Active surveillance
71	65.7	Classic seminoma	I	Active surveillance
74	48.8	Classic seminoma	I	Active surveillance
75	3.8	Spermatocytic seminoma	I	Active surveillance

Table 1: age of histological diagnosis, median follow up, stage and treatment
AJCC = American Joint Committee on Cancer

Diagnosis (Surgical pathology)	No of patients (n)	Median age in years (range)	AJCC stage	Treatment	Follow up in months (range)	Outcome
Classic Seminoma	16	53.5 (51-74)	I = 15 II = 1	CARB = 8 AS = 6 BEP = 1	46 (5.2-72.1)	Alive and remission = 15 Alive and relapse = 1 (waiting for CARB-XRT)
Mixed Germ Cell Tumours	5	58 (51-70)	I = 3 II = 2	AS = 4 BEP = 1	26 (15-69)	Alive and remission = 5
Sertoli-Leydig cell tumour	4	56 (53-65)	I = 3 II = 1	AS = 3 BEP = 1	35.5 (16-48)	Alive and remission = 3 Alive and relapse = 1 (failed RPLND and now with on BSC with liver metastasis)
Spermatocytic seminoma	1	75	I = 15	AS = 1	3.8	Alive and remission = 1

Table 2: treatment and outcome based on histological diagnosis
AJCC = American Joint Committee on Cancer; CARB = Single agent carboplatin; AS = Active surveillance; BEP = Bleomycin etoposide and cisplatin 3 cycles; CARB-XRT = single agent carboplatin followed by radiotherapy

4) Conclusion

- Our short survey demonstrates that older age testicular cancer patients with early stages can be managed safely with the modalities similar to younger age patient with good outcomes.

References:
1. Berney DM, Warren AY, Verma M, Kudahetti S, Robson JM, Williams MW, Neal DE, Powles T, Shamash J, Oliver RT. Malignant germ cell tumours in the elderly: a histopathological review of 50 cases in men aged 60 years or over. Mod Pathol. 2008 Jan;21(1):54-9. doi: 10.1038/modpathol.3800978. Epub 2007 Nov 2. PMID: 17975539.

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