

Experience of caring for people with Mesothelioma of the Tunica Vaginalis

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INTRODUCTION

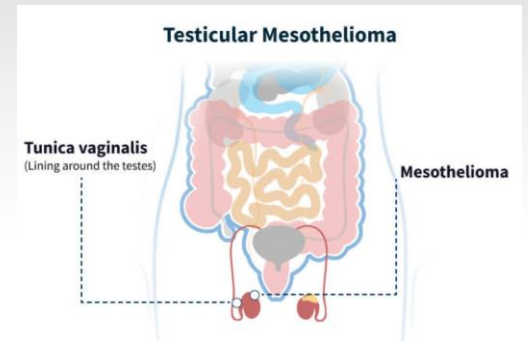
The UK has the highest incidence of Mesothelioma in the world; a dreadful statistic that directly correlates with the nation's past asbestos consumption.

The University Hospitals of Leicester (UHL) in the UK has a comprehensive mesothelioma service, a portfolio of clinical trials and they host the East Midlands regional weekly mesothelioma multi-disciplinary team meeting. Consequently UHL can receive in excess of 150 new referrals, for people living with mesothelioma, each year.

Malignant mesothelioma arising from the serosal membranes of the tunica vaginalis is rare. Most examples in the literature are individual case reports (Alkashash et al 2021). There are no guidelines for practice and no diagnostic pathways to support clinical teams (Grogg et al 2021). The team at UHL are currently caring for 4 patients with mesothelioma of the Tunica Vaginalis and this abstract seeks to provide insight into the care and treatment they have received.

The literature describes testicular mesothelioma as very aggressive tumours, almost exclusively caused by asbestos (Ebbinghaus-Mier 2022, Brun et al 2018). Presentation is commonly associated with hydrocele, treatment is focused on surgical resection with no treatment guidelines and a lack of evidence base for systemic anti-cancer treatment and differing opinions as to the benefits (Kazaz et al 2020, Brun et al 2018). Despite the bleak evidence Nazemi et al (2019) reviewed 113 patients on the SEER database and found that the 5-year survival for all patients was 49%, and the 10-year was 33%.

Mesothelioma is generally considered an incurable, occupational cancer entitling those affected to claim terminal illness and occupational benefits. They can also pursue compensation through a civil claim or well established government schemes. The benefits and compensation situation for people with testicular mesothelioma is less clear.



Picture source: <https://www.asbestos.com/mesothelioma/testicular/>

METHODS

Following a review of the literature a case and nursing note review was completed for the 4 gentlemen the mesothelioma team at UHL are caring for.

RESULTS

Location

1 patient local to UHL, 2 within East Midlands Cancer Network and 1 patient is out of area.

Age & PS

The patients are currently between the ages of 62 and 79 but were between the ages of 42 and 70 at diagnosis. 3 patients were and have remained PS0 and 1 PS1.

Diagnosis

3 patients confirmed as epithelioid mesothelioma and 1 mesothelioma with no subtype.

Laterality

3 patients diagnosed initially with RIGHT testicular mesothelioma and 1 LEFT.

Presentation

3 presented with a hydrocele and 1 with a lump. 2 had been diagnosed with a cyst 20 years and 8 months previously. 1 had a hydrocele for 3-4 years and 1 had a lump for 2 before being referred. 2 experienced pain at presentation.

PMH

1 patient had a previous cancer (colon 7 years prior to his mesothelioma diagnosis) but there was no other PMH of note with the other patients.

Occupation and Exposure

2 patients are unsure where or when their asbestos exposure occurred (lab worker and draftsman). 2 patients could recall exposure (painter/decorator and apprentice electrician). One considered use of talc as a possible source of exposure.

RESULTS

Benefits and Compensation

The patients all explored benefit and compensation entitlements and the following were secured.

Patient	AA/PIP	IIDB	BB	Lump Sum	Civil Claim
1	Yes*	Yes	Yes	Yes	Yes
2	Yes	Yes	Yes	Yes	Yes
3	Yes***	Yes**	Yes***	Yes	No
4	Declined	Yes	Declined	Yes	No
	* stopped after 2 renewals (9years)				
	** 10 years after diagnosis and after appeal				
	*** 18 years after diagnosis				

AA/PIP = Attendance Allowance or Personal Independence Payment
IIDB = Industrial Injuries Disablement Benefit
BB = Blue Badges for car
Lump Sum – Government mesothelioma payment scheme
Civil Claim – pursue claim through personal injury lawyer.

Surgical Treatment

All 4 patients underwent surgical orchidectomy. 1 patient had a 2nd orchidectomy and has had a further 5 resections for localised recurrence.

SACT

3 patients have not had any SACT. The 4th has had 4 lines of standard chemotherapy and 3 lines of targeted treatment as part of early phase trials

Follow up

Interval CT scans with occasional PET to assess for distant metastasis at presentation and occasional USS have been the usual imaging used for surveillance.

All patients have 3 monthly CT scans post surgical resection. 2 patients, that have not had SACT and remain stable now have annual follow up CT's. The 4th patient remains on active treatment. 1 patient has had multiple recurrences localised and distant since year 4 post diagnosis and he is now a 20 year survivor. 1 patient remains 'in status quo' and 2 patients have aortocaval nodes being monitored as part of disease surveillance.

Survival

The patients have survived 20, 9, 8 and 1 year since diagnosis.

CONCLUSIONS

- Testicular mesothelioma is a rare presentation
- Research and evidence are scant
- Hydrocele is a common presentation
- Diagnosis is often delayed
- Surgical resection is the gold standard.
- There is a lack of evidence to support treatment particularly SACT
- Patients may respond to standard SACT and novel treatments and should be considered for entry into appropriate clinical trials.
- The literature mostly describes a poor survival but large database review and experience at UHL supports a far better survival than other types of mesothelioma.
- Access to benefits and compensation is similar to patients with other types of mesothelioma.

References

- Alkashash et al (2021)** Malignant mesothelioma of the tunica vaginalis: A clinical and pathological study of 27 cases. *Laboratory Investigation. Conference: 110th Annual Meeting of the United States and Canadian Academy of Pathology. Virtual. 101(SUPPL 1) (pp 529-530); Nature Publishing Group.*
- Brun et al (2018)**. The necessity of a more aggressive initial surgical treatment in patients with mesothelioma of the testicular tunica vaginalis. *Annals of Medicine and Surgery* 47, pp. 57-60.
- Ebbinghaus-Mier et al (2022)**. Mesothelioma of the tunica vaginalis of the testis-a histopathological finding with far-reaching consequences. *Urologe (Ausg.A)* 61(3), pp. 292-296
- Grogg et al (2021)** Clinicopathological characteristics and outcomes in men with mesothelioma of the tunica vaginalis testis: analysis of published case-series data. *Journal of Cancer Research & Clinical Oncology* 147(9), pp. 2671-2679
- Kazaz et al (2020)**. Mesothelioma of the tunica vaginalis testis: A case report. *Indian Journal of Pathology and Microbiology, Vol 63, Issue 3 Pg 475-477.*
- Nazemi et al (2019)** Testicular Mesothelioma: An Analysis of Epidemiology, Patient Outcomes, and Prognostic Factors. *Urology April 2019 pgs 140-144.*

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