

MALE SYSTEM

GENITAL

MAIN CATALOGUE

COMMONWEALTH OF AUSTRALIA

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CASE 74

The specimen is of the testis, tunica vaginalis and distal spermatic cord. The cavity of the tunica vaginalis is dilated and there is mottling of the lining.

Diagnosis: Hydrocele

CASE 125

The specimen shows a simple unilocular cyst of the head of the epididymis. It is thin-walled, translucent and contains clear fluid.

Diagnosis: Epididymal cyst

CASE 3850

The specimen consists of a divided testis together with the tunica vaginalis. The latter is dilated to form a cavity 9 x 7 x 7 cm with a thick fibrous wall with a nodular lining. The testicular substance shows two wedge shaped haemorrhagic areas that may be infarcts.

Diagnosis: Hydrocele

Histology showed some tubular atrophy and focal haemorrhagic infarction of the testis.

CASE 8076

The patient was a man aged 67. No further clinical information is available.

The specimen is of the testis and distal spermatic cord. The testis contains a well-circumscribed rounded yellow tumour with some central haemorrhage and necrosis. The testicular substance appears normal.

Diagnosis: Malignant tumour of the testis

Histology showed the typical appearance of a renal cortical (Grawitz) carcinoma (metastatic).

CASE 9098

No clinical information is available.

The specimen consists of the testis together with the epididymis and distal spermatic cord. In the lower pole of the testis is a rounded irregular mass with poorly defined margins that shows areas of haemorrhage and necrosis.

Diagnosis: Non-seminomatous germ cell tumour

CASE 9383

The patient was a middle aged man who presented with nodules in the subcutaneous tissues of the arms and legs. The latter were associated with bony changes on x-ray. The liver and spleen were enlarged and there was an enlarged testicle. The Wassermann reaction was positive.

The specimen consists of the testis that is enlarged to form a mass that measures 7 x 5 x 5cm. The bulk of the tissue consists of variegated necrosis. A narrow rim of testicular tissue survives around the periphery.

Diagnosis: Syphilitic gumma

Histology showed necrosis surrounded by granulation tissue infiltrated with neutrophils, lymphocytes, macrophages and groups of plasma cells. Small vessels were scanty and endarteritis was not conspicuous.

CASE 9985

The patient was a man aged 68 who died from massive intestinal haemorrhage originating in a chronic peptic ulcer of the lesser curvature of the stomach that had eroded the left gastric artery. He had been treated as an outpatient for 3 years for a urethral stricture.

The specimen is of the penis, prostate and base of the bladder. There is a fibrous stricture of the proximal end of the penile urethra about 3cm distal to the lower border of the prostate. The lumen is reduced to about half the normal diameter. There is little surrounding fibrosis and no obvious mucosal ulceration.

Diagnosis: Urethral stricture

CASE 10462

No clinical information is available except that this is a surgical specimen.

The specimen consists of a testis together with an oval shaped piece of scrotal skin and distal spermatic cord. The testis is replaced by an ovoid neoplasm that measures 10 x 7 x 6cm. It is uniformly pale and fleshy in appearance except for some central necrosis.

Diagnosis: Seminoma

Histology showed a typical seminoma composed of diffusely arranged rounded cells with clear cytoplasm between delicate fibrous septa.

To where do seminomas typically metastasize? They metastasise first to the regional lymph nodes that are the para-aortic nodes. They subsequently commonly spread to the lungs, liver, brain and bone.

CASE 10643

The patient was a boy aged 14 who had had leukaemia for one year. At his final admission there was generalised enlargement of lymph nodes, a palpable spleen and a purpuric rash in the skin. Leucocytes numbered 190,000/c.mm with 94% myeloblasts.

The specimen consists of the testis together with some 6cm of spermatic cord. The testis is enlarged and measures 5 x 4 x 4 cm. Its substance is pale and homogenous.

Diagnosis: Leukaemic infiltration of the testis.

Histology showed a dense infiltrate of leukaemic cells between atrophic tubules.

CASE 16029

A man of 68 died from pulmonary embolism after transurethral prostatectomy.

The specimen of testis, epididymis and cord shows a cyst with a thin transparent wall arising in the body of the epididymis.

Diagnosis: Epididymal cyst

CASE 17812

The patient was a man aged 64 who died from a massive right middle cerebral softening.

The specimen is of a testis and tunica vaginalis. The latter is greatly distended by clear fluid. The appendix of the testis projects into the hydrocele at the upper pole of the testis.

Diagnosis: Hydrocele

CASE 18666

The patient was a chronic alcoholic man aged 47 who was admitted to hospital in pre-coma with incipient delirium tremens. He recovered for a time but later developed a proteus septicaemia, became hypotensive and demented and shortly died. At postmortem there was purulent tracheobronchitis and a large fatty liver, purulent prostatitis and left epididymitis.

The specimen is of the testis and surrounding structures. The epididymis is entirely replaced by pus. The testis appears normal.

Diagnosis: Purulent epididymitis

Histology showed gross suppurative epididymitis with neutrophils occupying the tubules and with abscess formation.

CASE 19364

The patient was a man aged 52 who died of carcinoma of the lung. At autopsy, the left testicular vein in the abdomen was also found to be greatly dilated.

The specimen is of the left testis and cord. Very large dilated, tortuous veins have caused great enlargement of the cord.

Diagnosis: Varicocele

CASE 19669

No clinical information is available.

The specimen consists of the distal 6cm of the penis including the glans. Arising from the left side of the coronal sulcus is a fungating carcinoma measuring 4 x 3cm. The tumour extends for a little distance on the surface of the glans.

Diagnosis: Carcinoma of the penis

What features is this tumour likely to demonstrate histologically? Invasive atypical cells (high N:C ratio, enlarged pleomorphic nuclei, prominent nucleoli) showing squamous differentiation (keratin formation, intercellular bridges, lots of eosinophilic cytoplasm).

CASE 19700

The patient was a man aged 39 who had had tuberculosis since the age of 8 years, affecting the lungs, genito-urinary tract and the left wrist. Six months before death he was admitted to hospital with a urinary fistula secondary to a left nephroureterectomy 2 months earlier. Increasing uraemia necessitated peritoneal dialysis. A right cutaneous ureterostomy was performed to drain a tuberculous pyelonephritis. Renal failure increased and he died a week later. At postmortem there was inactive bilateral pulmonary tuberculosis, a right tuberculous pyelonephritis and bilateral tuberculous epididymitis.

The specimen consists of the sectioned testes to show the epididymis on each side distended by caseous necrosis. There is no extension into the testis. The spermatic cords appear normal.

Diagnosis: Tuberculous epididymitis

CASE 21857

The patient was a man aged 20 whose right testicle began to swell 3 weeks after a blow from a cricket ball. Examination showed a swollen testis with clinical infiltration of the spermatic cord. X-ray of the chest showed 3 round cannonball deposits. The testis was removed.

The specimen consists of a longitudinally sectioned testis together with 8cm of the cord. The testis is totally replaced by a spherical tumour 9cm in diameter. Its cut surface is variegated with areas of necrosis and fibrosis. Large masses of pale fleshy tumour infiltrate up the spermatic cord.

Diagnosis: Non-seminomatous germ cell tumour

CASE 22143

The patient was a man aged 89 who died from the effects of a carcinoma of the right hypopharynx.

The specimen shows a normal appearing testis. A unilocular cyst is present in each spermatic cord, lying above the testis and apparently distinct from the tunica vaginalis.

Diagnosis: Cyst in the spermatic cord

CASE 22307

The patient was a man aged 65 who had repeated episodes of epididymo-orchitis secondary to prostatic obstruction. Antibiotics were ineffective and orchidectomy was performed.

The specimen consists of a section of testis and distal spermatic cord. The testicular substance appears essentially normal. The head of the epididymis is replaced by a 2cm bilocular cavity lined by pus.

Diagnosis: Suppurative epididymitis

CASE 22713

The patient was a man aged 47 who had cerebral palsy since birth. He had noticed a symptom-less swelling in the right scrotum for two weeks. The testis was not palpable but was replaced by a large hard ovoid mass with several palpable irregularities on its surface. It was not trans-illuminable nor fluctuant. The cord felt normal. Chest x-ray was normal. The testis was removed. Post-operative radiotherapy was given. **The specimen** consists of the right testis and the spermatic cord. The testis is enlarged, measuring 9 x 5 x 4 cm and has been largely replaced by pale nodular tumour. A thin rim of testicular tissue survives around the margin of the tumour.

Diagnosis: Seminoma

CASE 23333

The patient was a man aged 26 who had noticed the left testis to be enlarged 6 months previously. The swelling was painless until hit by a dog 4 weeks before operation. He had complained of backache. The testis was removed. The urinary gonadotrophins were elevated.

The specimen consists of the sectioned testis together with distal spermatic cord. The testis is enlarged and measures 7 x 6 cm. The cut surface shows a variegated appearance of cellular masses, degeneration, fibrosis and haemorrhage.

Diagnosis: Non-seminomatous germ cell tumour

CASE 23791

The patient was a man aged 79 with a 3-month history of ulceration at the urethral meatus with some bleeding for the last 2 months.

The specimen is the amputated penis measuring 11cm in length. The urethra has been opened from below to show a poorly defined ulcerated infiltrating tumour of the terminal 2cm within the glans.

Diagnosis: Carcinoma of the penile urethra

Histology showed poorly differentiated squamous cell carcinoma.

CASE 25224

The patient was a man aged 30. The breasts had been enlarged for 6 months and there had recently been an apparent epididymo-orchitis on the left side. On palpation a small lump could be felt in the testis. The testis was removed.

The specimen consists of the testis and distal cord. The testis is very slightly enlarged and contains at its lower pole a well-circumscribed, apparently encapsulated tan coloured rounded tumour 1.5cm in diameter.

Diagnosis: Leydig or interstitial cell tumour

Histology showed interstitial cell tumour.

How does this tumour cause gynaecomastia? These tumours commonly produce hormones, either androgens, oestrogens or both. When oestrogens predominate, breast enlargement results.

Are Leydig cell tumours benign or malignant? Most behave in a benign fashion though some can be malignant.

CASE 25251

The patient was a man aged 68 who had carcinoma of the bladder. A bladder papilloma had been treated 21 years previously. Before his final admission lumps appeared in the neck, on the back, in the right loin and on the shaft of the penis. These were treated by radiotherapy. He died of urinary tract infection and renal failure and at postmortem there was secondary carcinoma in many organs, and a large infiltrating carcinoma in the bladder. Lateral and posterior to the right kidney there was a very large unilocular neoplastic cystic cavity measuring 30 x 20 cm.

The specimen is of the penis divided in the longitudinal plane. It shows massive neoplastic nodular deposition in the corpora cavernosa. There is some ulceration of the urethra as a result of malignant invasion about 5cm from the meatus.

Diagnosis: Metastatic carcinoma to the penis

Histology showed poorly differentiated transitional cell carcinoma.

CASE 25253

The patient was a man aged 84 who had chronic pulmonary tuberculosis. He died of pulmonary embolism. He had been married twice and had one daughter. It is not known whether she was adopted. He presented with an aneurysm of the abdominal aorta for which he refused surgery. Incontinence of urine and faeces developed associated with congestive cardiac failure.

The specimen consists of the external genitalia and pelvic organs. The penis is small and measures some 6cm in length. There is hypospadias and the urethra is exposed on the inferior surface of the penis over a length of 3cm. There was a testis on the left side. It is displayed on the left of the jar and is atrophic, measuring 2 x 2.5 cm. The prostate is small. The continuity of the vas deferens with the seminal vesicles could not be traced and no definite seminal vesicles could be found.

There is a small atrophic uterus in the normal position to which a right tube and atrophic ovary are attached. The left ovary is absent and no definite cervix could be felt. The vagina is absent. The uterus did not communicate with the exterior or with any internal cavity.

Diagnosis: Hermaphroditism

Comment: Chromosomal sex of the polymorphs was of the female type.

CASE 5882/82

The patient was a man aged 43.

The specimen consists of the testis and spermatic cord. The testis has been sliced to reveal a spherical well-circumscribed, granular, pale lesion.

Histology showed that the granular material in the centre was laminated keratin arising from the squamous lining of the cyst.

Diagnosis: Epidermoid cyst of the testis

Comment: True epidermoid cysts of the testis are benign. However, this is a very rare lesion and great care must be exercised by the pathologist to ensure that the cyst is not just part of a teratoma.

CASE 11128/83

The patient was man aged 77.

The specimen consists of the glans penis and the external urethral meatus that are partly destroyed by an irregular invasive pale tumour. The foreskin has been reflected and irregular white patches suggestive of lichen sclerosus et atrophicus are seen affecting the glans penis around the tumour.

Diagnosis: Carcinoma of the penis

What features is this tumour likely to demonstrate histologically? Invasive atypical cells (high N:C ratio, enlarged pleomorphic nuclei, prominent nucleoli) showing squamous differentiation (keratin formation, intercellular bridges, lots of eosinophilic cytoplasm).

CASE 24876/88

The patient was a man aged 24. The patient had recurrent episodes of epididymo-orchitis and was known to have a hydrocele.

The specimen consists of a testis and cord. The tunica vaginalis is distended by fluid in which protein has deposited.

Diagnosis: Hydrocele