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DRUG-INDUCED LIVER FAILURE SECONDARY TO *PSORALEA CORYLIFOLIA*: A CASE REPORT AND LITERATURE REVIEW

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Background: We present a case of a 56-year-old male presenting with acute liver failure requiring transplantation after intake of *Psoralea corylifolia* for five weeks. Acute liver injury secondary to herbal and dietary supplements (HDS) should be suspected in patients presenting with acute liver failure. Awareness of HDS's associated risk is important in the setting of their increasing use, with at least 23% of adults in the United States reporting using alternative therapies. One such implicated remedy is the plant *Psoralea corylifolia*, used in Ayurvedic medicine as an alternative treatment for conditions including psoriasis and vitiligo.

Aims and methods: A literature review using Ovid-Medline was undertaken to identify similar cases. Other potential causes were excluded clinically, radiologically and serologically to establish causality. Sections of the recipient liver were formalin-fixed and paraffin-embedded for staining with haematoxylin and eosin and other routine special stains.

Results and conclusions: Sections of the liver showed extensive necrosis varying from submassive to massive. No other cause for the liver injury was identified on clinical correlation. Thus histological findings were compatible with a clinical history of drug induced liver injury.

This report highlights a case of *Psoralea corylifolia*-induced acute liver failure requiring transplantation, compared to seven other cases in the literature, with one reported subsequent death. The popularity of *Psoralea corylifolia* as an Ayurvedic remedy highlights the clinical significance of its potential hepatotoxicity. A clinician should have a high index of suspicion for HDS use with patients presenting with acute liver failure.

ENDOMETRIAL CARCINOMA SENTINEL LYMPH NODE ULTRASTAGING: BALANCING COST AND EFFICACY TO DEVELOP AN OPTIMAL PROTOCOL

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Background: Sentinel lymph node (SLN) sampling is a relatively novel, increasingly used method of staging endometrial carcinomas, but a standardised accepted methodology does not exist. After introduction of SLN sampling at our institution, we developed an in-house protocol for SLN examination, which

specifies three 'up-front' serial haematoxylin and eosin (H&E) levels with an accompanying broad-spectrum cytokeratin (MNF116).

Aims: We have audited Mater's up-front approach, and compared it to the published MD Anderson Cancer Center (MDACC) and the Memorial Sloan Kettering Cancer Center (MSKCC) step-wise, algorithmic protocols, to compare cost-efficiency and efficacy.

Methods: Reports from all endometrial carcinoma cases examined over the last 29 months were reviewed to identify positive (metastases and isolated tumour cells; ITCs) SLNs. The corresponding slides were re-examined to determine which level the malignant cells were detected. This data was then used to simulate the MDACC and the MSKCC protocols.

Direct evaluation of the sensitivity of each protocol was considered to be outside of the scope of this retrospective study.

Results and conclusions: 189 cases evaluated detected eight cases with metastases, discovered on the first H&E level. Twelve of the 13 cases with only ITCs were discovered on the first MNF116 level, with the 13th on the second MNF116 level. The third paired level failed to detect further positive nodes in any case. We show the Mater protocol is comparable to the MDACC and MSKCC protocols in terms of efficacy. The step-wise algorithms reduce cost, but potentially result in prolonged turnaround times; whereas the Mater protocol generates more slides up-front to reduce turnaround time, but Results in a slightly higher average cost of per case.

MATURE TERATOMA IN AN UNDESCENDED TESTIS

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Background: Cryptorchidism occurs in 2–5% of boys born at term and is the most common congenital urogenital abnormality. Germ cell tumours are more likely to occur in cryptorchid testes, however pre-pubertal teratomas are unrelated to germ cell neoplasia *in situ* and are one of the most common tumours in the testes of boys. In the literature, there are only approximately 30 cases of mature teratoma occurring in a cryptorchid testis. In our case, laparoscopic orchiectomy was performed on a 12-month-old boy with a left undescended testis.

Aims: To exclude malignancy in the undescended testis.

Methods: Photos were taken of macroscopic features as well as routine H&E staining.

Results and conclusions: We describe a mature teratoma in an undescended testis, with mature cartilage, bone, and fibrous tissue as the predominant components. Negative staining for AFP, bHCG and PLAP excluded other common germ cell differentials. Prepubertal teratomas are benign, however given limited experience in the cryptorchid setting, continued observation is recommended.