with major complications such as intrarenal AVM. This can probably be prevented by judicious and careful use of laser energy in patients with large stone burdens and premorbid conditions.

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[61] Surgical management of pain as a complication of radio-embolisation of varicocoele

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Objective: To present our experience of surgical management of pain as a complication of radio-embolisation of varicocoele. The indication to treat a painful varicocoele is well established; however, the approach of treatment whether surgical or radiological remains controversial. The use of materials such as coils during radio-embolisation may lead to exacerbation of pain, which might require surgical removal of the endovascular material.

Methods: All patients between March 2016 and February 2017, who experienced painful exacerbation after radio-embolisation of a varicocoele, were included in this retrospective single-centre study. Ultrasonography was performed to exclude recurrence or other aetiology. A transperitoneal laparoscopic surgical procedure allowed removal of embolisation material and gonadal vein after ligation between the internal inguinal ring and its distal end on the renal vein or inferior vena cava.

Results: Three patients were operated upon using this technique. Two patients had unilateral left and one bilateral varicocoeles with radio-embolisation. No intraoperative complications were identified. The intervention reduced the pain allowing early recovery and continuation of usual daily activities.

Conclusion: The exacerbation of pain in a varicocoele after radio-embolisation is a rare complication but has significant consequences on patient quality of life and thus requires appropriate care. Removal of the material laparoscopically seems a method of choice. The elimination of other painful causes before any surgical management remains essential.

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[62] The mystery of gross haematuria in a patient on leflunomide: A case report and literature review

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Objective: To report a case of gross haematuria in a patient on leflunomide. In 1998, the USA Food and Drug Administration approved leflunomide for the treatment of active rheumatoid arthritis. Leflunomide is classified as a disease-modifying anti-rheumatic drug (DMARD), which has immunomodulatory, anti-inflammatory, analgesic, and antipyretic effects.

Methods: We report an atypical case of a 70-year-old woman who presented with two isolated episodes of gross haematuria with mild thrombocytopenia, 5 months after she was started on leflunomide. Cystoscopy showed an abnormal bladder neovascularisation pattern with bleeding from one of the small vessels. Based on the timeline and clinical course, we hypothesised that the gross haematuria and neovascularisation was associated with the use of leflunomide. An electronic search of PubMed/MEDLINE was performed with the text words ‘Leflunomide’, ‘haematuria’, ‘angiogenesis’, ‘neovascularization’, and ‘DMARD’. The relevant articles were selected for review.

Results: The literature review revealed one report of gross haematuria that was associated with leflunomide, and this was due to its interaction with warfarin. There were no reports that related to an abnormal bladder neovascularisation with leflunomide as seen in our case. She presented with two episodes of gross haematuria after she was started on leflunomide and presented to our hospital on her second episode. The second episode of gross haematuria was severe, which required blood transfusions, multiple manual bladder washouts, and cystodiathermy in the operating theatre. Rigid cystoscopy showed an abnormal neovascularisation pattern throughout the bladder. The haematuria stopped subsequently. The thrombocytopenia improved, and haematuria did not recur after the cessation of leflunomide. A follow-up cystoscopy 3 months later showed a similar neovascularisation pattern with no active bleeding.

Conclusion: The literature shows that leflunomide has anti-proliferative and anti-angiogenesis activities. To the best of our knowledge, we have not been able find a reasonable explanation for the observed bladder neovascularisation pattern and its association with DMARD, particularly leflunomide.

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