



Ministry of Defence

Headquarters Surgeon General Secretariat
6th Floor Zone E
Ministry of Defence
Main Building, Whitehall
LONDON, SW1A 2HB

Ref: FOI2015/05700

Email: SGSecFin-SecGpMailbox@mod.uk



16 July 2015

Dear 

Thank you for your email of 28 June requesting the following information under the Freedom of Information Act 2000 (FOIA).

- 1. Please confirm the position of each of the armed forces (RAF, British Army and Royal Navy) to applicants for reserve service (RAuxAF, Army Reserve, RNR) who have a medical history of kidney stones;**
- 2. Please confirm the position of each of the armed forces for serving personal (regular and reserve) who are diagnosed with kidney stones during their military careers;**
- 3. Please confirm the total number of medical conditions requiring regular medication (for example, a medicine with a daily dose) which would not prevent an applicant for reserve service being considered medically fit.**

The answers to your three questions are as follows:

1. The tri-Service policy on renal calculus in applicants for service (regular and reserve) is set down in Joint Service Publication (JSP) 950 Leaflet 6-7-4. The section on "Urolithiasis" states that:

"Candidates who have a confirmed history of calculus formation are graded P8 (*permanently medically unfit for service*). A candidate with a history of a single episode of ureteric spasm (renal colic), which has been investigated without demonstration of underlying pathology, may be graded P2 (*medically fit for unrestricted service worldwide*). Those with a history of recurrent (more than one) ureteric spasm are graded P8."

Specifically, renal calculi are grounds for being unfit for entry into the submarine service. BR1750(A) Chapter 13 paragraph 1305 i.(1) states:

i. Genito-Urinary Conditions

(1) Renal calculi and malformations of the urinary system will be cause for rejection unless adequately treated. A family history of polycystic renal disease should trigger investigation for the disease and referral to SMO(SM) if the candidate is found to suffer from the condition."

They are also grounds for being unfit to become a naval diver. BR1750A) Chapter 12 paragraph 1213 states:

“1213. Genito-Urinary Conditions

Renal calculi and malformations of the urinary system will be cause for rejection unless adequately treated. Divers and candidates must be stone-free prior to return to diving.”

2. The tri-Service policy on renal calculus in serving personnel is set down in Joint Service Publication (JSP) 950 Leaflet 6-7-5. The section on “Urinary Disorders” states that:

“A persistent abnormality of urinalysis (defined as haematuria of any degree and proteinuria above "trace" on dipstick testing on each of three occasions), with or without raised blood pressure, may indicate a nephrological pathology. Any persistent abnormality should be investigated, with referral to a nephrologist, as appropriate.

a. Nephro-urological conditions. Permanent medical grading of P3 (*Medically fit for duty with minor employment limitations*) or P7 (*Medically fit for duty with major employment limitations*) should be considered for any personnel developing nephro-urological conditions (e.g. nephritis (acute glomerulonephritis, pyelonephritis), urinary incontinence, recurrent urolithiasis or malignant disease), which either degrades the functional capacity and/or fails to respond satisfactorily to treatment (whether there is persisting abnormality of urinalysis, blood pressure, and glomerular filtration rate/creatinine clearance rate, or not).

b. Special work problems and restrictions. Personnel with renal or urinary tract disease should be subject to appropriate risk assessment prior to any deployment or posting.

The Army and Naval Services have confirmed that they follow this tri-Service guidance, and that individuals who are in service are managed on a case by case basis based on their risk of recurrence. The RAF has provided additional documents in the form of the following extracts from AP1269A (attached below):

- Leaflet 5-05: Urogenital System
- Leaflet 5-05: Annex A – Algorithm for management of personnel
- Leaflet 5-05: Annex B – Metabolic investigations form

3. We are unable to confirm the total number of medical conditions requiring regular medication which would not prevent an applicant being considered medically fit for Reserve service. There are a great number of low-risk medical conditions and physical anomalies which are compatible with P2 medical grading. Most conditions have a range of grading, and the grade given will depend on the individual, after review by the single Service consultant occupational physician responsible for medical entry.

If you are not satisfied with this response or you wish to complain about any aspect of the handling of your request, then you should contact me in the first instance. If informal resolution is not possible and you are still dissatisfied then you may apply for an independent internal review by contacting the Information Rights Compliance team, 1st Floor, MOD Main Building, Whitehall, SW1A 2HB (e-mail CIO-FOI-IR@mod.uk). Please note that any request for an internal review must be made within 40 working days of the date on which the attempt to reach informal resolution has come to an end.

If you remain dissatisfied following an internal review, you may take your complaint to the Information Commissioner under the provisions of Section 50 of the Freedom of Information Act. Please note that the Information Commissioner will not investigate your case until the MOD internal review process has been completed. Further details of the role and powers of the Information Commissioner can be found on the Commissioner's website, <http://www.ico.gov.uk>.

Yours sincerely,

Headquarters Surgeon General Secretariat

AP1269A – LEAFLET 5-05: UROGENITAL SYSTEM

RENAL STONE DISEASE

16. Clinical Concerns. RSD is common in young adults. Renal colic may present without warning and result in severe, distracting and potentially incapacitating pain. Prolonged renal tract obstruction requires decompression to prevent permanent renal damage. RSD is often familial and may be associated with identifiable biochemical abnormalities. After a first stone the likelihood of forming a second is approximately 15% at one year and 50% at 10 years with the greatest rates of recurrence occurring at 2 and 8 years. Symptomatic patients should be referred urgently to their local Emergency or Urology department for confirmation of the diagnosis and initial treatment. Radiological screening of those with RSD acknowledges the potential adverse effects of irradiation, the limitations of ultrasound and the differing risks between ground and flight based occupations.

17. Employment Limitations.

a. *Recruit.* JSP 950, Part 6, Chapter 7, Lflt 6-7-4 Annex F.

b. *Serving Personnel.* Serving personnel who have an occurrence of renal colic or are diagnosed with renal stone disease are to be awarded a JMES of L3, 'unfit for service outside base areas'. Once stone-free, most patients can be awarded an unrestricted L2 category. Frequent stone formers and personnel with residual stones are to remain medically downgraded unless any residual stones are deemed by a consultant physician to be unlikely to become symptomatic. An algorithm outlining management and disposal of personnel with RSD is at Annex A. All personnel with RSD are to have metabolic investigations 3 months post diagnosis as outlined at Annex B.

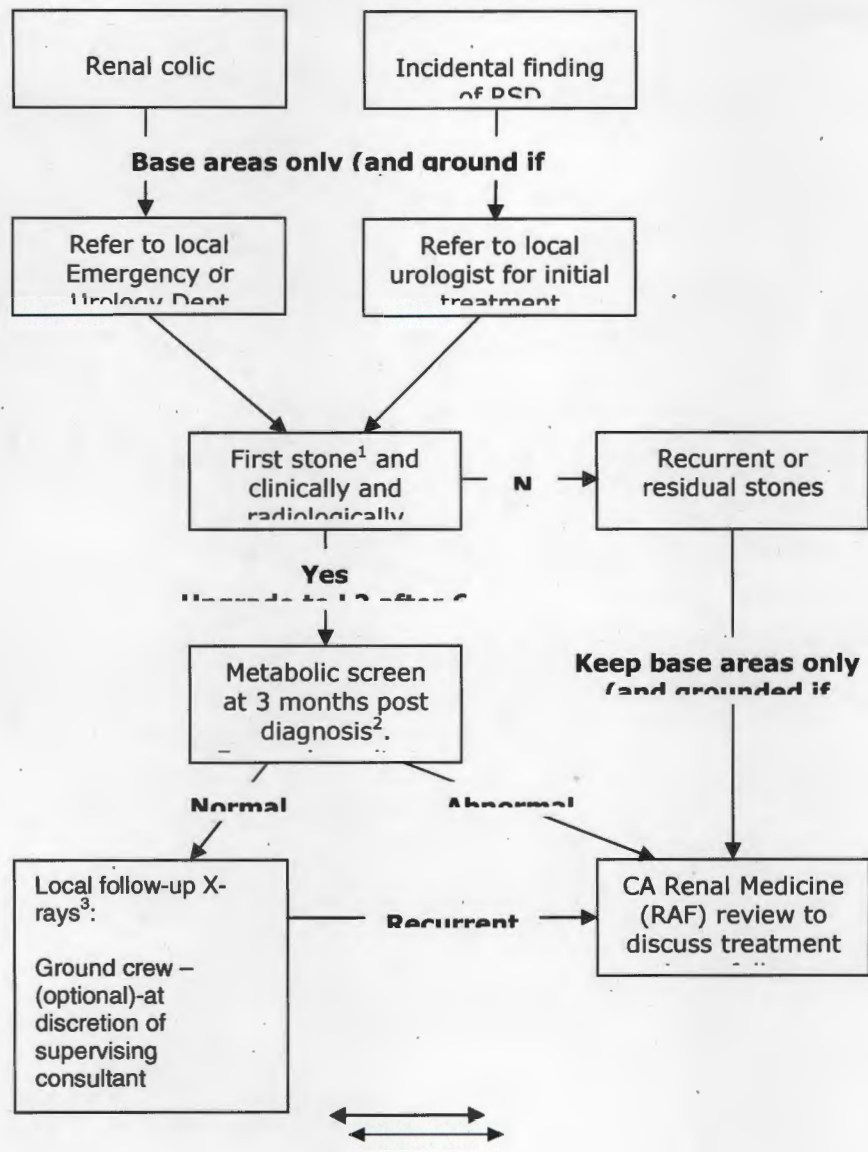
c. *Aircrew.* In addition to the limitations outlined for serving personnel outlined above, aircrew are to be grounded until stone free. Aircrew with recurrent RSD, or with residual stones not amenable to treatment, are to be referred to the CA in Renal Medicine. If residual stones are considered unlikely to become symptomatic a return to restricted flying (A3, 'unfit solo pilot - must fly with a pilot suitably qualified on type' (060) or equivalent for other aircrew roles (063)) should be possible.

18. Treatment. Service personnel with renal stones will normally have their stones removed by Extracorporeal Shock Wave Lithotripsy (ESWL). This may be carried out locally for both ground personnel and aircrew. Where any doubt exists regarding the treatment of renal stone disease, the advice of the RAF CA in Urology or Renal Medicine is to be sought. Following metabolic investigations, which should be carried out on all patients 3 months after the passage of their stone, prophylactic treatment to prevent further stone formation may be indicated. Treatment with citrate supplements or Allopurinol is compatible with full ground or flying duties and requires only an L2 category. The use of thiazide diuretics is acceptable for full ground and flying duties, but for aircrew, a four week period of assessment for side effects should be carried out prior to return to flying. Regular blood biochemistry is to be carried out as for all patients on thiazide therapy. Follow-up radiography is mandatory for aircrew at 1 and 2 years post diagnosis and 2-yearly thereafter. Where possible, abdominal x-rays limited to the renal beds are preferred. Ultrasound scans will be necessary for personnel with a history or radiolucent stones.

19. Discussion. Idiopathic stone disease, which makes up the vast majority of stone disease in a military population, is associated with the formation of calcium oxalate stones. These are formed due to an imbalance between stone promotion (raised urinary calcium, oxalate etc) and stone inhibition (low urinary citrate, magnesium, urinary glycoproteins etc) in a setting of urinary crystalloid saturation. Dehydration is thus an important factor, as are factors that tend to increase urinary stone promoter excretion, such as high oxalate intake (chocolate, strawberries, rhubarb and nuts) or a high calcium intake. Excess sunlight, by increasing the formation of active vitamin D will also contribute to increased calcium absorption and subsequent excretion. Patients should be made aware of these important factors and should avoid them where possible – use of a patient information leaflet is helpful in this context. If made aware of the problems of dehydration and

sunlight, there is no requirement to routinely downgrade personnel with renal stones to E3. Now that lithotripsy is the mainstay of treatment for stone removal, careful follow up should identify those at risk of colic and consequent sudden incapacitation. This will demonstrate early new stone formation and will allow early referral for re-treatment. Most patients will warrant only an L2 category for their stone disease.

LEAFLET 5-05 ANNEX A: ALGORITHM FOR MANAGEMENT AND DISPOSAL OF SERVING PERSONNEL WITH RENAL STONE DISEASE (RSD)



¹ The presence of 2 or more stones at presentation should be managed as recurrent stones.

² See Annex B

³ Abdominal X-rays limited to the renal beds are preferred. Ultrasound may be required for radiolucent stones. DMICP diary entries should be used to ensure timely follow-up.

LEAFLET 5-05 ANNEX B: METABOLIC INVESTIGATIONS FOR RENAL STONE DISEASE

The investigations below should be arranged locally whilst the patient is on their normal diet. The completed Annex should then be returned to CA Renal Medicine (RAF).

Blood Tests: Non-fasting.

Early Morning Urine (EMU): The patient should collect the entire volume of their first void and bring it to the medical centre first thing in the morning for pH testing with standard urine dipsticks. This should be repeated on 3 separate occasions. A single separate sample should be sent to the local laboratory for cystine screening.

24 Hour Urine Excretion: Daily urinary chemical composition, as detailed below, should be measured on 3 separate occasions.

RESULTS

Unit			
Surname		Initials	
Date of Birth		Service Number	
Branch/Trade		JMES	A L M E

Brief history of renal stone disease including date of renal colic, passage of stone and any treatment:

Patients' weight:

Stone analysis (if available):

Description

Percentage of: Calcium Phosphate Oxalate Urate

PROTECT MEDICAL (When Complete)

Blood Test	Results	Units/Ref Range
Haemoglobin		
Sodium		
Potassium		
Chloride		
Creatinine		
Urea		
Corrected Calcium		
Phosphate		
Alkaline Phosphatase		
Uric acid		
Bicarbonate		

Urine Test	Results (1)	Results (2)	Results (3)	Acceptable Values	
				Male	Female
MSU for Culture				-	-
Cystine Screen				-	-
Morning Urine pH*				≤ 5.5	≤ 5.5
24 Hr Volume				>2 l/d	>2 l/d
24 Hr Calcium				<300 mg/d (7.5 mmol/d)	<250 mg/d (6.3 mmol/d)
24 Hr Oxalate				<45 mg/d (0.5 mmol/d)	<45 mg/d (0.5 mmol/d)
24 Hr Uric Acid				<800 mg/d (4.8 mmol/day)	<750 mg/d (4.5 mmol/day)
24 Hr Citrate				>320 mg/d (1.7 mmol/d)	>320 mg/d (1.7 mmol/d)
24 Hr Creatinine ⁺				20 mg/kg (177 μ mol/kg)	15 mg/kg (133 μ mol/kg)

* Consider renal tubular acidosis if pH >5.5 . Risk of urate stones unlikely if pH >6.5 .

^ Hyper-uricosuria increases risk of calcium oxalate stones. Risk of urate stones unlikely if <1100 mg/d (7.1 mmol/d).

+ Low values suggest incomplete collection or low muscle mass.

Name
Rank
Position
Date