

24 h urine collections in patients with nephrolithiasis, nephrocalcinosis or hematuria

Background

- One urine collection does not enough to depict the true lithogenic risk factors
- Patients tend to behave at such urine collections „ideal typical“
 - o E.g. drink more than they normally do
- Influence of dietary factors on urine results is not completely excludable
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Our Procedure

- Urine collection on three (following) days at home
 - o 1. day: normal diet, fluid intake as always
 - o 2. day: low oxalate diet, fluid intake as always
 - o 3. Day: high oxalate diet (e.g. spinach or rhubarb), fluid intake as always
- Urine preservation with 5 % Thymol in Isopropanol
 - o Aliquoting in our lab
 - Calcium etc
 - Acidified sample (oxalate, citrate)
- Family screening should always be performed, when index case shows lithogenic risk profile

Be aware: many patients change their dietary habits and fluid intake at time of urine collection. This will change the urine excretion of many parameters. So patients have to be advised that they should follow the above procedures. Especially, a diet low in calcium is obsolete! No urine collection at time of infusion therapy.