

Tests, treatments and procedures at risk of inappropriateness in Italy
that Health Professionals and Patients should talk about.

Five Recommendations from the Italian Society of Pediatric Nephrology – SINEPe

1	<p>Urine culture should not be carried out either routinely or in the absence of the typical symptoms of a urinary tract infection; bag urine collection should be avoided</p> <p>Routine urine culture (once a month) is often performed as part of the follow-up of children with congenital nephro-urological malformations or as part of the standard screening tests for children in good clinical condition. In these cases, the finding of bacterial growth, even at high colony counts, is almost certainly due to contamination, given the difficulty involved in collecting a sterile specimen from a child, or the possible presence of asymptomatic bacteriuria, which does not require specific treatment. Bag urine collection, a method widely used in children for the collection of a suitable specimen for urine culture, carries a high risk of contamination and should be replaced by other methods such as the mid-stream clean catch method or urinary catheterisation.</p>
2	<p>In the case of low-grade or asymptomatic proteinuria, it is not necessary to perform blood tests or complex instrumental exams. In these cases, medical history, physical exam and urine tests (two separate tests performed at least a week apart) are sufficient. The appropriate diagnostic approach for proteinuria should be followed, if proteinuria persists.</p> <p>In paediatric clinical practice, the occasional finding of low-grade proteinuria is frequent, though it is not always an indication of kidney damage or disease. However, the definition of a more appropriate diagnostic approach is useful both for the timely detection of diseases which could potentially compromise renal function if neglected or left unrecognised, and in order to avoid useless and costly treatments.</p> <p>When low-grade proteinuria is detected, a thorough medical history should be taken and a physical exam carried out in order to look for clear signs and symptoms of renal disease (oedema, urinary disorders, macroscopic alterations in urine colour; arterial hypertension, altered height/weight growth and/or particular skin damage); then the persistence of proteinuria should be confirmed. When history and physical exam are negative, the most appropriate diagnostic tool is repeat urinalysis.</p> <p>In the case of triggering events (physical exertion, fever or temporary dehydration with excessive concentration of the urine), proteinuria can be detected with a single urine test. In the absence of a triggering event, urinalysis should be performed on at least two separate occasions, more than a week apart.</p> <p>Conversely, persistent proteinuria requires an in-depth diagnostic approach (microscopic examination of the urinary sediment, urine culture, quantification of proteinuria, blood and instrumental tests).</p>
3	<p>The indiscriminate use of albumin in children with a first episode of nephrotic syndrome is not recommended.</p> <p>In children presenting with a first episode of nephrotic syndrome, albumin infusions (followed by intravenous boluses of furosemide) should be exclusively limited to hypovolemic patients. While in these children albumin infusions can increase intravascular volume, thus improving renal haemodynamics and increasing diuresis, in hypervolemic cases the opposite occurs and hypovolemia can be exacerbated, contributing to hypertension and the risk of causing or worsening pulmonary oedema. Clinical symptoms (hypotension, tachycardia, abdominal pain, headache or dizziness, drowsiness, delayed capillary refill, muscle cramps) and a marked reduction in the fractional excretion of sodium (FENa <0.2) are the evaluation parameters to use in the diagnosis of hypovolemia.</p>
4	<p>When asymptomatic microhaematuria is detected in a random urine sample, biochemical or instrumental exams are not necessary.</p> <p>The incidence of isolated microhaematuria in random urine testing is about 8% in children of 3 years of age; this percentage falls to 3-4% in schoolchildren. Nevertheless, in both of these paediatric age groups, the incidence of microhaematuria at subsequent urinalysis falls significantly to 0.7-1.5%. Second level exams are only recommended in the case of persistent microhaematuria and results should be considered in combination with medical history, clinical symptoms and erythrocyte morphology in order to guide investigations toward screening for glomerular or urologic diseases.</p>
5	<p>Children under 6 years of age with primary monosymptomatic enuresis do not need to be seen by a specialist, undergo laboratory (with the exception of urinary dipstick) or instrumental testing or start pharmacological treatment.</p> <p>Primary monosymptomatic enuresis in children under 6 years of age does not require specialist treatment or specific diagnostic testing, with the exception of a simple urine dipstick test. When analysing a urine dipstick test, the possible presence of glycosuria and proteinuria should be evaluated and the specific gravity should be checked. No pharmacological treatment is necessary. What is required, however, is a detailed anamnesis of bladder function. After 6 years of age, before any eventual specialist visit, at least six months of behavioural therapy (an hour and a half before bedtime reduce liquid intake to a minimum, empty the bladder before going to bed and no drinking during the night) is recommended, together with keeping a bladder diary. Bowel function should also be corrected. If behavioural therapy should fail (at least 50% dry nights) an 8-week period of associated support therapy (enuresis alarm or 120 mcg desmopressin every evening) can be discussed with the family. The month before starting treatment, a bladder diary must be completed in order to compare results with those taken during the month after the start of treatment. If this approach proves unsuccessful (at least 50% dry nights), a specialist visit is recommended.</p>

Please note that these items are provided for information only and are not intended as a substitute for consultation with a clinician. Patients with any specific questions about the items on this list or their individual situation should consult their clinician.

How this list was created

All the society members were informed of this initiative by means of a document describing its intention. Members were then asked to present some indications with the aim of choosing the five treatments and procedures that were most at risk of inappropriateness, that is the five that received the highest number of indications. Following that, the board of directors created a document based on these five procedures, which was subsequently presented at the 31st SInePe National Congress, held in Vieste in 2015, in order to ensure full cooperation. The document was then sent to all the society members for their approval. The critical comments and positive notes were taken on board and the final version of the text was produced and sent to Slow Medicine.

Sources

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Slow Medicine, an Italian movement of health professionals, patients and citizens promoting a Measured, Respectful and Equitable Medicine, launched the campaign "**Doing more does not mean doing better- Choosing Wisely Italy**" in Italy at the end of 2012, similar to Choosing Wisely in the USA. The campaign aims to help physicians, other health professionals, patients and citizens engage in conversations about tests, treatments and procedures at risk of inappropriateness in Italy, for informed and shared choices. The campaign is part of the Choosing Wisely International movement. Partners of the campaign are the National Federation of Medical Doctors' and Dentists' Orders (FNOMCeO), that of Registered Nurses' Orders (FNOPI), the Academy of Nursing Sciences (ASI), National Union of Radiologists (SNR), Tuscany regional health agency, PartecipaSalute, Altroconsumo, the Federation for Social Services and Healthcare of Aut. Prov. of Bolzano, Zadig. www.choosingwiselyitaly.org; www.slowmedicine.it

The Italian Society of Pediatric Nephrology (SInePe) includes Italian professionals in Pediatric Nephrology. The aims of the Society are: to promote the advancement of clinical and experimental studies in the field of Pediatric Nephrology; to favour the development and standardisation of research methodologies and clinical applications; to encourage collaborative research between Italian and foreign groups; to foster the scientific training of young researchers; to promote the dissemination of knowledge and teaching in the field of Pediatric Nephrology; as well as to encourage initiatives aiming at the prevention and at social aspects of pediatric diseases of the urinary tract. www.sinepe.it