

Sickle Cell Trait and Hematuria: Information for Healthcare Providers



People with sickle cell trait (SCT) may develop hematuria or blood in the urine. While hematuria is often not a cause for major concern, it can be a sign of a serious medical condition and should not be ignored.

Healthcare providers should perform a comprehensive medical evaluation to determine the exact cause of the bleeding. Hematuria can be attributed to SCT only after all other causes have been ruled out.

What are the signs and symptoms of hematuria?

Gross or macroscopic hematuria is urine which, instead of its normal pale yellow color, is pink, bright red, or brown. Microscopic hematuria is urine that is typically not discolored, but there are red blood cells present that are detected by certain tests. Just like in people without SCT, hematuria in people with SCT may be macroscopic or microscopic, and may or may not be associated with other symptoms. Evaluation by a nephrologist or urologist is essential.

What causes some people with SCT to develop hematuria and how can these triggers be avoided?

The exact circumstances and/or triggers that cause some people with SCT to develop hematuria remain unknown. It is possible that dehydration and extreme exercise may play a role. In very rare cases, hematuria in sickle cell trait can be associated with renal medullary carcinoma.

What can healthcare providers do when a person with SCT shows signs of hematuria?

Healthcare providers should evaluate people with SCT for other potential causes of hematuria (e.g. intrinsic glomerular disease, infection, nephrolithiasis, trauma, malignancy, etc.) and attribute the bleeding to SCT only when all other causes have been ruled out.



What treatments are available for hematuria in people with SCT?

Most episodes of hematuria attributed to SCT can be treated conservatively with fluids and activity restrictions. Refractory bleeding is rare and requires treatment by a specialist.

For More Information:

National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)

<http://www.niddk.nih.gov/health-information/health-topics/urologic-disease/hematuria-blood-in-the-urine/Pages/facts.aspx>



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