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History in Nephrology

Legends whose contributions inspire us even today!

Microhaematuria

- *Thomas Addis (1881 -1949)*
- *Birch DF and Fairely KF (1979)*



Thomas Addis (1881 -1949)

Described microscopic haematuria through his pioneering work on urinary sediment examination.

He introduced systematic microscopic analysis of urine, including quantification of red cells (Addis count, 1926), laying the foundation for recognising microhaematuria

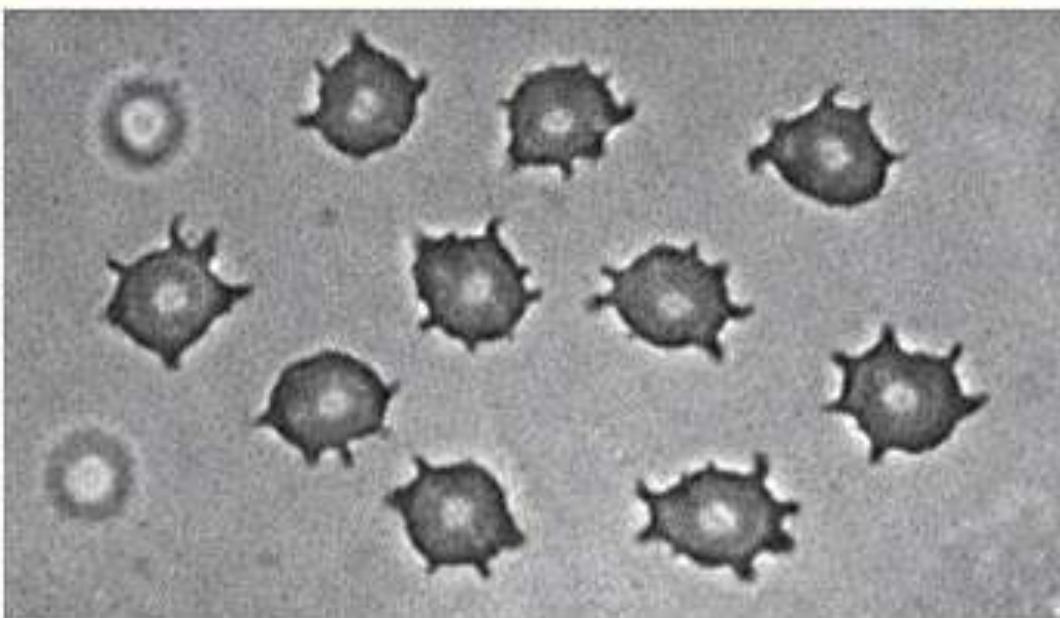


Birch DF & Fairley KF (1979)

***Dysmorphic RBCs indicating
Glomerular hematuria were
described by Birch and Fairley***

Dysmorphic Red Blood Cells – Glomerular Hematuria

Birch DF & Fairley KF, BMJ 1979



Urinary dysmorphic red blood cells (acanthocytes) seen on phase-contrast microscopy, indicating glomerular origin of hematuria. Described by Birch DF and Fairley KF (BMJ, 1979)

$\geq 5\%$ acanthocytes \rightarrow Highly specific for glomerular hematuria

Isomorphic RBCs \rightarrow Non-glomerular (urological) source

Birch DF and Fairely KF (1979) demonstrated that dysmorphic red blood cells in urine are characteristic of glomerular haematuria.

They showed that irregularly shaped RBCs (especially acanthocytes) on urine Phase – contrast microscopy help differentiate glomerular from non-glomerular sources of haematuria