

Strips for Kidney stone vulnerability evaluation

Abstract

Oxalate is a natural product of metabolism in the body that is excreted through urine. If in the body, oxalate levels are too high i.e above $0.4\mu\text{g}$, the extra oxalate can combine with calcium to form kidney stones. These stones are hard masses of chemicals that can get stuck in the urinary tract.

In this project, an innovative strip that can estimate oxalate in urine has been developed. The Strip is easy to use and can be operated by any person, without the use of any special equipment. The developed strip uses nano-composite techniques along with colour chart for rapid estimation (semi-quantitative) of oxalate in urine.

Salient features:

Developed strip is low cost, allows rapid detection and easy to manufacture.

Equipment Required:

- (1) Paper strip cutter
- (2) Card laminator and Dispenser
- (3) Spray machine

Product:

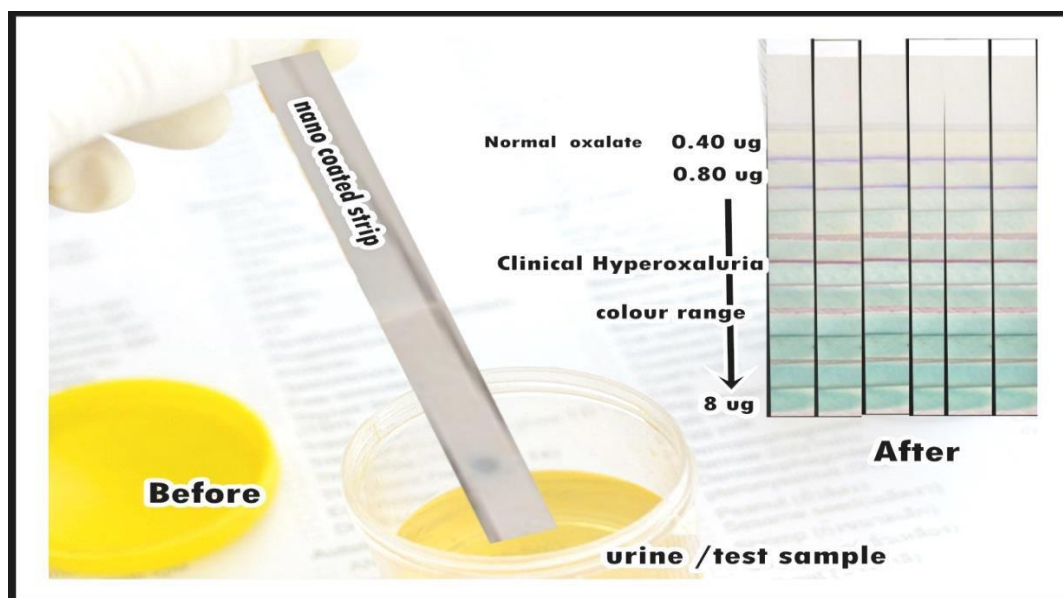


Fig: Strips for evaluating Kidney stone vulnerability and standard chart.

Estimated Cost of Strip: Rs.40/- per strip (High production may reduce the cost)

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