

## Mesenchymal stem cells therapy in acute renal failure: Possible role of hepatocyte growth factor

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Acute renal failure (ARF) is a rapid loss of renal functions due to damage to the kidneys. Mesenchymal Stem cell therapy holds a great promise for the repair of injured tissues and organs, including the kidney.

Hepatocyte growth factor is identified as a potent mitogen for fully differentiated hepatocytes. HGF exhibits mitogenic action on renal endothelial and epithelial cells.

We aimed to study the effect of MSC as a line of treatment for ARF and the possible mechanism by which they act through studying their effect on the inflammatory & vascular manifestations. We aimed also to study the effect of HGF as another line of treatment for ARF with comparison between both lines.

We concluded that MSC & HGF can exert a protective effect against acute renal failure by paracrine mechanisms through down regulation of proinflammatory cytokine TNF- $\alpha$  and up regulation of anti-inflammatory IL-10 and the growth factor VEGF.

### Biography

Mohammed Elsebaie has completed his M.D. at the age of 31 years from the faculty of medicine, Cairo University. He is lecturer of medical biochemistry in faculty of medicine Cairo University. He published one paper in reputed journals.

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