Toxic Effect of Aluminium sulphate to Histopathological Changes of Kidney of Mice Fetus

Abstrak:

Abstract
The objective of this study is to find out the toxic effect of aluminium sulphate (Al2SO4) in kidney of mice fetus (Mus musculus) histopathologically. Three groups of pregnant mouse (4 mouse/group) were given 0, 500 ppm and 1000 ppm (Al2SO4), during gestation period from the 6th day to 15th. On the gestation day 18, the mouse were sacrificed and the kidney of fetuses were prepared for histological examination, using paraffin method and routine hematoxilin-eosin staining. Nine days administration of 500 and 1000 ppm Al2SO4 resulted in degeneration and necrosis of proximal convuluted tubules. The degenerative changes consist accumulation of protein in cytoplasm of epithelial cells and evident of large cellular casts in the lumen of tubuli. Additionally, enlargement of glomeruli, hemorrhages and hyperemia. The worse effect was, of course, in those with 1000 ppm Al2SO4.

Keyword:

Toxic Effect, Aluminium sulphate, Kidney