

# Acute cell-mediated rejection

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In the era of modern immunosuppressive drugs, the incidence of acute cell-mediated rejection (CMR) is only 10-20%. Acute CMR is largely mediated by direct antigen presentation. As donor APCs in the allograft have a lifespan of only a few weeks, the peak incidence of acute CMR is in the first 3 months post transplantation. The characteristic biopsy finding of acute CMR is a marked interstitial lymphocytic infiltrate ( Figure 88.8 ). In the kidney , the presence of lymphocytes inside the basement membrane of the renal tubular epithelium is referred to as tubulitis and is diagnostic of acute CMR. Initial treatment is by high-dose pulsed intravenous steroids (methylprednisolone 0.5 g intravenously for 3 days), which is

## Figure 88.8 Severe acute renal allograft rejection with a heavy mononuclear cell infiltrate and intimal arteritis.

nuclear cell infiltrate and intimal arteritis.

rejection is treated with lymphocyte-depleting intravenous antithymocyte globulin (ATG).

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