Other indications for ATG

Adults:

→ Treatment for acute rejection:

The recommended dosage of Thymoglobulin for treatment of acute renal graft rejection is 1.5 mg/kg of body weight administered daily for 5 to 7 days (cumulative dose 7.5 – 10.5mg/kg). Although licensed for 7 – 14 days for AR treatment, this duration is usually not necessary. After the initial 5-7 days dosing, an assessment should be made, and further treatment may be given if the rejection process is ongoing.

Reduce the dose by half if total WCC <3 x109/l and/or Platelets <75 x109/l. Dose should be withheld when total WCC < 2×109/l or platelet count < 50×109/l.

Premedication of Hydrocortisone 200mg IV (omit oral prednisolone), paracetamol 1g PO and chlorpheniramine 10mg IV before administering thymoglobulin.

A test dose is NOT needed for ATG treatment in most cases. [1]

However, if the patient has had a previous reaction to ATG or has a history of close exposure to rabbits, it may be considered [5 mg ATG in 100 ml NaCl 0.9% infused through a peripheral vein over 1 hour]. [2]

→ Chronic graft-versus-host disease (prevention) (off-label use):

IV: 0.5 mg/kg administered 2 days prior to transplant and 2 mg/kg administered 1 day before and 1 day after transplant or 2.5 mg/kg once daily for 3 days beginning 3 days prior to transplant. [3]

→ Heart transplant (induction therapy in high-risk patients) (off-label use):

IV: 1 to 1.5 mg/kg once daily for up to 7 days. [4]

→ ## Heart transplant (acute cellular rejection, treatment) (off-label use):

IV: 0.75 to 1.5 mg/kg/day for 5 to 14 days.[5] [6]

→ ## Intestinal and multivesicular transplantation (induction therapy) (off-label use):

IV: 2 mg/kg/day on postoperative days 0, 2, 4, 6, and 8 (in combination with rituximab). [7]

→ ## Lung transplant (induction therapy) (off-label use):

IV: 1.5 mg/kg/day for 3 days; the first dose was administered within 24 hours of transplantation. [8] [9]

→ ## Lung transplant (persistent acute cellular rejection, treatment) (off-label use):

IV: Pulse treatments have been used to manage persistent acute cellular rejection . [10]

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[9]- Hartwig, M. G., Snyder, L. D., Appel, J. Z., 3rd, Cantu, E., 3rd, Lin, S. S., Palmer, S. M., & Davis, R. D. (2008). Rabbit anti-thymocyte globulin induction therapy does not prolong survival after lung transplantation. The Journal of heart and lung transplantation : the official publication of the International Society for Heart Transplantation, 27(5), 547–553. https://doi.org/10.1016/j.healun.2008.01.022

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