



Anaphylactic Shock After Retreatment With Basiliximab*

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THE PROPHYLACTIC use of interleukin (IL)-2 antibodies at the time of transplantation (antibody induction therapy) in combination with maintenance immunosuppression has been advocated to improve allograft outcomes. Basiliximab is a chimeric (human/mouse) monoclonal antibody with a half-life of approximately 7 days. The reagent binds to the alpha chain of the IL-2 receptor, thereby blocking IL-2-mediated activation of T-lymphocytes.^{1,2}

Basiliximab has been approved to prevent acute rejection after renal transplantation. It was well tolerated during clinical trials. The cytokine release syndrome (fever, chills, hypertension, lung edema, headache) has not been observed among patients who receive basiliximab.^{3,4}

The objective of this study is to report a 4-year-old renal retransplant recipient, who was retreated with basiliximab and displayed anaphylactic shock. The first transplant was performed from a living donor, in December 1999. At that time he received two doses of 10 mg basiliximab without side effects. The graft was lost due to renal venous thrombosis. In January 2001, the patient underwent a second transplant from a cadaveric source. Basiliximab 10 mg, (IV) + methylprednisolone 180 mg were administered in the operating room after the patient had been intubated. Severe hypotension was observed a few minutes after antibody administration requiring advanced life support. A subdermal infiltration that vanished after half an hour was also observed. Because the patient remained in shock, unresponsive to dopamine, adrenalin, noradrenalin, and volume infusion, the transplant was aborted. Cyclosporine and mofetil mycophenolate had also been administered 2 hours prior to operation. The anesthesia included propofol 30 mg, fentanyl 45 mcg and atracurium 8 mg. Six hours later the patient recovered to his previous blood pressure levels. There was no neurologic damage, despite the prolonged and severe hypotension.

To our knowledge, this is the first published report of a

patient with an anaphylactoid reaction to a retreatment with basiliximab.

OBSERVATION

Novartis sent a letter to North American Transplant Centers in October 2000 to inform physicians of reports of 17 cases of severe acute hypersensitivity reactions, including anaphylaxis, occurring in patients after administration of Simulect (basiliximab). These reactions have been observed both on initial exposure to basiliximab or following re-exposure even after several months. The reactions may include hypotension, tachycardia, cardiac failure, dyspnea, bronchospasm, pulmonary edema, respiratory failure, urticaria, rash, pruritus, or sneezing. Patients previously administered basiliximab should only be re-exposed to a subsequent course of therapy with extreme caution.

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