A prospective non-randomized study was undertaken to test whether immunosuppression improves implantation and pregnancy rates in an in-vitro fertilization-embryo transfer (IVF-ET) programme in patients with tubal factor infertility. Treatment involved ovarian stimulation, transvaginal oocyte retrieval, IVF-ET, and assessment of short-term administration of large doses of corticosteroids (60 mg of methylprednisone x 4 days). When compared to the group that did not receive immunosuppressive doses of methylprednisone (group A; mean age 31.85 +/- 4.09 years), those subjects who were treated (group A2) showed a statistically significant increase in pregnancy (P < 0.01) and take home baby rate (P < 0.01). Similar results were observed in subjects who received corticosteroids in their first IVF-ET attempt (group B; mean age 34.32 +/- 4.98 years). Our results suggest that immunosuppressive doses of corticosteroids administered for a short period of time to patients undergoing IVF-ET could significantly improve the implantation and pregnancy rates. Possible mechanisms of action of corticosteroids are proposed.