

Most children show rapid clinical improvement with the implementation of dialysis, although it is directly related to the duration of uremia before dialysis and good nutrition. Growth rate and skeletal maturation improve, but recovery of normal growth is infrequent. In many cases, sexual development, although delayed, progresses to completion.

Transplantation

Kidney transplantation is an acceptable and effective means of therapy in the pediatric age group. Although peritoneal dialysis and hemodialysis are life preserving, both require major alterations in lifestyle. Transplantation offers the opportunity for a relatively normal life and is the preferred form of treatment for children with ESRD.

Kidneys for transplant are available from two sources: a **living related donor**, usually a parent or a sibling, or a **cadaver donor**, wherein the family of a dead or brain-dead patient consents to donation of a healthy kidney. Retransplantation may be required if rejection occurs.

The primary goal in transplantation is the long-term survival of grafted tissue by securing tissue that is antigenically similar to that of the recipient and by suppressing the recipient's immune mechanism. The immunosuppressant therapy of choice has been corticosteroids (prednisone) in conjunction with cyclosporine or tacrolimus and mycophenolate mofetil. Other therapies include antilymphoblast globulin or monoclonal antibodies. New immunosuppressant medications and early withdrawal of steroids or steroid-free protocols are rapidly coming into clinical trials and use in large transplant centers (Kim, Webster, and Craig, 2013). It is important for the nurse to learn about the medications used in the antirejection protocol(s) and their side effects. Because the immunosuppressant medications are taken indefinitely, transplant patients experience many side effects of the drugs, including hypertension, growth retardation, cataracts, risk of infection, obesity, characteristics of Cushing syndrome, and hirsutism.

Nursing Alert

The child with a kidney transplant who exhibits any of the