Transplantation in Children

**FIGURE 16-42**
Data from the United States Renal Data Source regarding distribution of causes of death in children aged 0 to 19, 1993 to 1995. (From United States Renal Data System [3]; with permission.)

**FIGURE 16-43**
Data from the North American Pediatric Renal Transplant Cooperative Study on causes of death by age group. This study revealed a high rate of attrition among pediatric transplantation recipients under the age of 5 years. It is unclear whether this high rate is due to a higher rate of infection. (From Tejani and coworkers [39]; with permission.)

**FIGURE 16-44**
Data from the 1995 North American Pediatric Renal Transplant Cooperative Study showing a total of 214 deaths. Infection was the leading cause of death, occurring in 74 patients. This graph depicts the survival distribution estimates by donor source. Infants aged under 2 years at the time of transplantation have a mortality rate of 14%. This rate is significantly higher ($P < 0.001$) than in other age groups, with a mortality rate between 4.7% and 8.0%. (From Warady and coworkers [5]; with permission.)
Transplantation as Treatment of End-Stage Renal Disease

Data from the North American Pediatric Renal Transplant Cooperative Study of patient mortality by recipient age. A significant difference (P < 0.001) in 1-year mortality rates by age groups occurred: 13.6% (21 of 154) for 0- to 1-year-old recipients; 8.0% (33 of 413) for 2- to 5-year-old recipients; 3.6% (33 of 926) for 6- to 12-year-old recipients; and 4.5% (43 of 964) for 13- to 17-year-old recipients. Mortality also is increased for recipients of kidneys from young cadaveric donors. A dramatic increase in cumulative mortality is seen, with increasing concordance between young donor and recipient ages. (From Tejani and coworkers [39]; with permission.)

The effect of acute tubular necrosis (ATN) on patient survival. The development of ATN leads to a significantly higher (P = 0.0001) mortality rate of 13.2% (risk ratio of 3.1) for the 310 patients reported on in the registry. A 25% mortality rate and 6.4 risk ratio were noted for the 188 patients who developed graft failure within 30 days after transplantation (P < 0.001). (From Tejani and coworkers [39]; with permission.)


