Appendix 6 Hypovolaemic shock

Blood loss during surgery predisposes the child to the real and potential risk of hypovolaemic shock. Hypovolaemic shock is defined as a compromise in systemic perfusion resulting in inadequate intravascular volume relative to the vascular space. It may be caused by absolute blood loss, fluid and electrolyte loss, redistribution of blood volume or plasma loss from the vascular space. Clinical signs include tachycardia, poor systemic perfusion, reduced or low venous pressures, falling hematocrit levels, and hypotension. (Hazinski 2013)

Shock may also be characterised as compensated or decompensated. When compensated shock is present, the child’s blood pressure is normal although signs of inadequate tissue and organ perfusion (e.g., lactic acidosis, oliguria, altered level of consciousness) are observed.

Decompensated shock is present when hypotension develops. As a consequence even mild hypotension must be treated quickly and vigorously because it signals decompensation, and cardiopulmonary arrest may be imminent. (American Heart Association/American Academy of Pediatrics 2001)