BiliBlanket phototherapy system versus conventional phototherapy: a randomized controlled trial in preterm infants.

Costello, SA; Nyikal, J; Yu, VY; McCloud, P

Abstract:

This study compares the use of standard overhead fluorescent phototherapy units with the BiliBlanket a woven fibreoptic pad which delivers high intensity light with no ultraviolet or infrared irradiation in the treatment of jaundice in preterm infants. METHODOLOGY: We chose to study infants between 800 and 2500 g, with strict criteria for commencing and ceasing phototherapy. Serum bilirubin levels were followed at 12-24 h intervals until 24 h after cessation of phototherapy. Infants were allocated at random to receive either conventional phototherapy or the BiliBlanket. RESULTS: There were 24 infants in the conventional group and 20 in the BiliBlanket group. Mean duration of phototherapy was compared and was 44 h for the conventional group versus 42 h for the BiliBlanket group. CONCLUSIONS: We have shown that the BiliBlanket is as effective as conventional phototherapy and was well accepted by nursing staff and parents.