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ORIGINAL TITLE	The Effect of intrauterine infection on neonatal thyroid function
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ABSTRACT	Intrauterine infections were diagnosed by the determination of cord serum IgM levels. The incidence of intrauterine infection was found to be 11per cent in Kandy District. The functional status of the foetal thyroid in relation to intrauterine infection was assessed by the determination of cord serum T3, T4 and TSH levels. It was observed that when cord serum IgM levels were elevated, the levels of TJ and TSH were also elevated. However, no significant difference was seen in the T4 levels. Since IgM does not cross the human placenta. cord serum IgM is of foetal origin and elevated levels of cord serum IgM levels are non-specific indicators of intrauterine infection. Therefore, it was concluded that intrauterine infections probably affect foetal thyroid function. Nevertheless clinical symptoms of altered thyroid function were not seen in any of the neonates studied. Antibodies to thyroid microsomal antigen were seen in 4 neonates with elevated levels of cord serum IgM. In 2 of these neonates, thyroid microsomal antibodies were not seen in the corresponding maternal sera, suggesting a foetal autoimmune response to thyroid microsomal antigen. By determination of specific IgM antibodies in cord serum it was shown that filarial antigens cross the human placenta. It is unlikely that such passage of antigens can establish an infection in the foetus. but may have important implications in the maturation of the immune system. This study therefore. shows that foetal thyroid activity is affected by intrauterine infection. Further. the passage of filarial antigens across the human placenta is also shown.