

**The effect of oral *Rathakalka* on immunoglobulin and complement levels in neonates**

To evaluate the effect of an indigenous preparation **Rathkalka** on the serum immunoglobulin and complement levels of infants.

The samples of 40 neonates were used from teaching hospital, Banaras Hindu University, India. Test group was given **Rathkalka** 250 mg. for two months and control group was on placebo for two months. Serum immunoglobulins (IgG, IgA & IgM) and complements (C3 & C4) were assessed in neonates from cord blood and later at the end

of two months follow up by Single Radial Immunodiffusion technique. Pre treatment levels of immunoglobulins and complements were compared with the post treatment levels.

The recipe **Rathkalka** revealed significant changes in serum IgG levels in treated group. Normally serum IgG levels decrease with the increase in age during infancy. These levels have decreased in both the groups but the physiological decrease of IgG was found less in the treated group. Post treatment IgA and IgM levels increased significantly ( $p < 0.001$ ) in the treated group. Serum C3 and C4 levels were also found enhanced significantly ( $p < 0.01$ ) in treated group.

Conclusion Rathkalka has the capacity to enhance immunoglobulin and complement levels in neonates. This study provides scientific support for the use of Rathkalka to prevent certain diseases in neonates by traditional Ayurvedic physicians in Sri Lanka.

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