SUMMARY AND CONCLUSION
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The present study was conducted in the department of Pediatrics, M.L.B. Medical College, and Hospital, Jhansi from June, 1990 to May, 1991 to assess the efficacy of oral water soluble vitamin K in neonates.

The study was conducted on 51 full term babies (gestational age more than 37 weeks) weighing more than 2 kg and who were born after uncomplicated vaginal delivery. The selection of cases was random and cases were randomly assigned to four different groups viz. A, B, C and D. The study was done in 31 batches and with each batch of tests a healthy adult was run as control case. All the babies who were selected for the study were exclusively breast fed.

A full antenatal history was taken prior to selection of cases. The mean birth weight of babies of group A was $2.72 \pm 0.18$ kg, while that of group B babies was $2.85 \pm 0.19$ kg. The mean birth weight of babies in group C and D was $2.62 \pm 0.19$ and $2.74 \pm 0.22$ kg respectively.
The sex distribution (M : F) in study groups A, B, C and D was 1 : 1, 3:1, 1 : 1 and 1 : 1 respectively. Vitamin K was administered to cases in study group A, B and C within two hours after birth. The mean age of blood sample collection in study group A, B, C and D was 49.13±13.03, 48.03±15.13, 48.00±14.14 and 48.00±14.14 hours respectively. None of the cases had any complication after administration of vitamin K.

After collecting the sample prothrombin time was determined within one hour by Quick's one stage method. The mean prothrombin time of cases in the study group A, B, and C was 19.24±3.32, 19.17±3.14 and 20.13±3.31 seconds respectively, being almost identical. Prothrombin time of cases in the study group D was prolonged (34.10±4.02 seconds) as compared to adult control cases. The mean prothrombin time of adult control cases was 15.33±1.49 seconds. The prolonged mean prothrombin time in study group D was statistically significant (p < 0.001) as compared to control cases while the prothrombin time values in study groups
A, B, and C were not significantly different from control cases.

From the present study, it is concluded that:

1. Vitamin K prophylaxis may be given to all the newborn infants.

2. With an advantage oral water soluble vitamin K can safely be given to newborns as prophylaxis.

3. Oral water soluble vitamin K is as effective as intramuscular vitamin K.

4. 1 mg oral water soluble vitamin K is as effective as 1 mg or 0.5 mg of intramuscular vitamin K.

5. Oral water soluble vitamin K is a much simpler form of prophylaxis and avoids intramuscular injection.

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