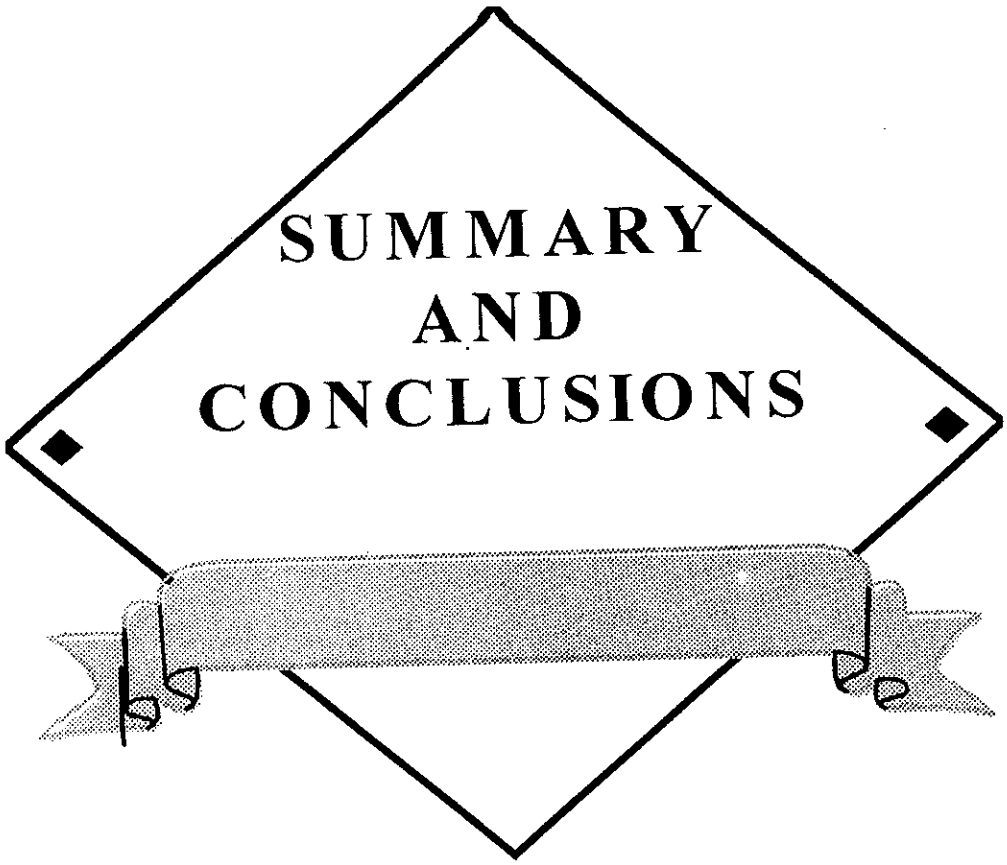
SUMMARY AND CONCLUSIONS



SUMMARY AND CONCLUSIONS

This study was carried out on 90 infants (60 malnourished infants in compare to 30 control infants), 59 male and 31 female, 39 were ≤ 1 year and 51 were > 1 year, all infants recieved 3 intramuscular doses of hepatitis B vaccine at intervals (0 - 1 - 6 months) and the antibody response checked 2 monthes after the last dose of the vaccine.

According to our results we found that malnutrition impairs the antibody response as there is statistically significant difference between the mean anti HBsAb titre of malnourished group (62.58 ± 42.78) when compared to that of control group (102 ± 42.58).

The more the severity of malnutrition the lower the mean anti HBsAb titre as there is no statistically significant difference between the mean anti HBsAb in mild (98.75 ± 39.59) and that in control (102 ± 42.58), but there is significant difference between the mean Anti HBs Ab titre in moderate (63.25 ± 12.9) and severe (25.75 ± 33.84) if compared to that of control group (102 ± 42.58).

We also observed that neither the sex nor the age of recipient influenced the response to vaccine. Breast feeding improves the response to the vaccine but the presence of complication impaires it.

In conclusion, vaccination with larger dose or revaccination with booster dose to the malnourished infants may be recommended.

A more immunogenic vaccine e.g. which contain pre-s or HBcAg component or simultaneous administeration of immunmodulatory

substance as interferon, interleukin 2 and thymopentin with HBV vaccine is a new hope that may improve the response to the vaccine.

Evaluation of T cell function and other immuno - mechanisms in order to diagnose the non responsivness is recommended to be done in future study of immuno compromised patients.