

COMPARISON OF BILIRUBIN LEVELS WITH TWO INTRAVENOUS LIPID EMULSIONS IN PREMATURES

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OBJETIVES

Liver disease is associated with intravenous soybean lipid in parenteral nutritions (PNs), this has led to development and use of alternative intravenous lipid emulsions (ILEs). The aim of this study was to compare the effects of two alternative ILEs: Lipoplus® (with soybean and fish oil) and Clinoleic® (combination of soybean with olive oil).

METHODS

RETROSPECTIVE, OBSERVATIONAL STUDY A TERTIARY CARE HOSPITAL

December'12

May'14

Pharmacotherapeutic records of pretermatures were reviewed

-gender,
-gestational age
-birth weight.
-Laboratory data
-total (TB),
-conjugated (CB)
-unconjugated bilirubin (UB)

Lipoplus®

VS

Clinoleic®

RESULTS

Baseline	Lipoplus®	Clinoleic®
CB (mg/dL)	0.9	0.3
UB (mg/dL)	8.7	7.8
TB (mg/dL)	8.7	9

End of PN	Lipoplus®	Clinoleic®
CB (mg/dL)	0.7	0.5
UB (mg/dL)	9.8	9.2
TB (mg/dL)	8.7	9.4

DISCUSSION

Combination lipid emulsions have a more favorable impact on bilirubin levels compared with soybean. Since, fish oil LE has been shown to have a beneficial effect on liver function, it may be that simply using fish oil would yield better results, but there is inadequate evidence when it comes to determine if any new ILE is better than the others regarding bilirubin levels.

CONCLUSIONS

Clinoleic® and Lipoplus® were safe and well tolerated, and they are both effective alternatives to pure soybean ILE in pretermatures. The comparison between the two ILE did not show a greater benefit or significantly less persistent hyperbilirubinaemia for any group.