7. Approach to IEM in Indian NICU

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Abstract: IEM is quite common in sick newborns and correct diagnosis is very important for proper treatment and prognostication. Unfortunately in India, we don't have any authentic data on incidence of IEM in general population or CINB. Because of this there is no standard protocol or SOP in NICUs. In this paper we have analyzed data of last 8 yrs [1999 – 2007] from our center. Of the 601 referred babies for evaluation of IEM in CINB, we could complete analysis in 463 children. Here we shall also compare different approaches used in NICUs and their pick-up rates. At our Centre we use detailed metabolic workup (details of which are provided in the paper). We could identify IEMs in 335 (72.35%) babies with this approach, what we call CINB profile. Some other approaches would have pick-up rates much lower than CINB Profile viz. Only GC-MS (33.26%), only TMS (35.42%), both TMS & GC-MS (52.91%) and Expanded NBS (56.37%). Detailed symptomatologic approach along with a clinical geneticist's opinion is far better than other approaches for sick neonates. This way we will pickup almost all (~100 %) cases. The cost difference is not much and we have discussed it in this paper.