



Editorial Open access

Watchful waiting in cases of breast milk jaundice in newborns

Breast milk jaundice is a clinical problem encountered frequently in newborns [1]. BMJ is characterized by levels of unconjugated serum bilirubin >2 mg/dL. It is estimated that between 60% and 80% of all term or late-term, healthy newborns exhibit idiopathic jaundice [1]. Theoretically, jaundice can be due to overproduction of bilirubin (such as hemolysis), impaired bilirubin uptake by the liver (in conditions such as decreased blood flow to the liver), or use of certain drugs [2].

Jaundiced-appearing infants and children with jaundice should first be evaluated promptly for sepsis. Once sepsis is excluded, other important causes of hyperbilirubinemia, such as anemia from hemolytic disorders, which destroy red cells, should also be excluded [3]. Neonatal jaundice without sepsis and anemia might be associated with inherited disorders of impaired bilirubin conjugation [4, 5].

Most cases of breast milk jaundice are associated with unconjugated hyperbilirubinemia. Therefore, an important initial step is to determine whether hyperbilirubinemia is due to unconjugated bilirubin. The finding of hyperbilirubinemia with a large conjugated component calls for a different approach to the workup. The causes of conjugated hyperbilirubinemia are largely distinct from those of unconjugated hyperbilirubinemia, although some cases may have mixed mechanisms [6].

In this volume, Kotcharit et al. [7] report the prevalence and time course of infants with breast milk jaundice with unexpectedly high frequency of elevated liver enzyme levels. These infants had similar levels of average total bilirubin at first presentation, but the average total bilirubin remained twice as high as the normal liver enzymes in infants aged 2 months. The total bilirubin levels of the elevated enzyme group become normal spontaneously despite continued breast

feeding [7]. The authors recommend close clinical monitoring or "watchful waiting". They recommend against interrupting breastfeeding and supplementing feeding with formulas based on cow's milk, which can deprive the newborns of the benefits of their mother's milk.

References

- Bratton S, Cantu RM, Stern M. Breast milk jaundice. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing. [online]
 2020. [cited 2020 Jan 30]. Available from: https://www.ncbi.nlm.nih.gov/pubmed/30726019.
- [2] Pasha YZ, Alizadeh-Tbari S, Pasha EZ, Zamani M. Etiology and therapeutic management of neonatal jaundice in Iran: a systematic review and meta-analysis. World J Pediatr. 2020. doi: 10.1007/ s12519-020-00339-3
- [3] Kaplan M, Wong RJ, Sibley E, Stevenson DK. Neonatal jaundice and liver disease. In: Martin RJ, Fanaroff AA, Walsh MC, editors. Neonatal-perinatal medicine: diseases of the fetus and infant. 9th ed., vol. 2. St. Louis: Elsevier Mosby; 2011, p. 1443–96.
- [4] Watchko JF, Daood MJ, Biniwale M. Understanding neonatal hyperbilirubinaemia in the era of genomics. Semin Neonatol. 2002; 7:143–52.
- [5] Maruo Y, Nishizawa K, Sato H, Sawa H. Shimada M. Prolonged unconjugated hyperbilirubinemia associated with breast milk and mutations of the bilirubin uridine diphosphate-glucuronosyltransferase gene. Pediatrics. 2000; 106:E59. doi: 10.1542/ peds.106.5.e59
- [6] Gottesman LE, Del Vecchio MTD, Aronoff SC. Etiologies of conjugated hyperbilirubinemia in infancy: a systematic review of 1692 subjects. BMC Pediatr. 2015; 15:192. doi: 10.1186/s12887-015-0506-5
- [7] Kotcharit P, Chongsrisawat V, Chatproedprai S. Prevalence and time course of elevated serum levels of liver enzymes in healthy infants with breast milk jaundice: a cohort study. Asian Biomed (Res Rev News). 2020; 14(2):67–73.

^{*}Correspondence to: Editorial Office of Asian Biomedicine, Faculty of Medicine, Chulalongkorn University, Bangkok 10330, Thailand, e-mail: abmjournal@chula.ac.th

³ Open Access. © 2020 Editorial Office of Asian Biomedicine, published by Sciendo. © This work is licensed under the Creative Commons Attribution NonCommercial-NoDerivatives 4.0 License.