BLOOD GROUPING, JAUNDICE AND URINARY INFECTION IN THE NEWBORN

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INTRODUCTION :

Jaundice is one of the most common causes of hospitalization in newborns. The association with urinary tract infection is the subject of several controversies. In neonates, jaundice may be one of the initial symptoms related to urinary tract infection (UTI).

OBJECTIVES :

This study aimed to evaluate the related factors of neonatal infants with the initial presentation of hyperbilirubinemia and the final diagnosis of UTI .

PATIENTS AND METHODS:

We retrospectively studied the medical records of newborns admitted to the Neonatal Intensive Care Department, Mohammed VI University Hospital and Research, Marrakesh, between January and December 2016 having a urinary infection revealed by jaundice.

RESULTS:

- A total of 139 newborns were admitted for neonatal jaundice
- 41 cases (29.5%) had a urinary tract infection.
- The mean age of admission was 8.5 days.
- The most common germ was Escherichia coli.
- Rhesus incompatibility was associated in 12.2% and ABO incompatibility in 22%.
- group O + :was the most frequent (40.6%) and rhesus + was predominant (87.5%),
- Malformative uropathy was found in 5%.

Figure 1: distribution of sex

Figure 2: Germs of urinary tract infection

Figure 3: Incompatibility and urinary tract infection

Figure 4: Blood grouping and urinary tract infection

Figure 5: Rhesus and urinary tract infection

DISCUSSION :

The prevalence of urinary tract infection (UTI) in jaundiced newborns varies between 1 to 11% [1,2,3,], the increase in prevalence in our study can be explained by recruitment of infected patient . The most common germs are Escherichia coli (38%) followed by klebsiella pneumoniae. This joins the results of the literature [1,4].

We found some peculiarities concerning the association jaundice and IU, the newborns were mainly boys, having in their antecedents a maternal UI or a premature rupture of the membranes. Several studies have shown acute or recurrent IU predispositions for some blood-group antigens, including positive rhesus and E.coli [3,4].

In our study, 40% of neonates ; blood grouping was performed were group O versus 60% for group B positive in a study in Fes [4].

Positive Rhesus were objectified in 87% of cases. In our study, jaundice was most often early, with 63% of newborns admitted during the first week of life. This joins the results of the literature [5,6].

CONCLUSION

Performing urinary tests to exclude the possibility of coincidental UTI may be necessary for admitted jaundiced infants younger than if they have a high level of indirect bilirubin.

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