

Letter to the Editor

Antibacterial Activity of the Breast Milk : Can this Laboratory Observation translate to Clinical Usefulness?

THE antibacterial activities of human breast milk that are derived from the presence of lysozymes, secretory IgA and cytokines are well established.¹⁻³ However, the direct effects of breast milk when used topically in conjunctivitis have not been previously reported in humans, although, it has been reported that conjunctivitis is rare in calves due to the milk that constantly bathed their eyes.⁴ This correspondence concerns an observation made during a study of the pattern of neonatal conjunctivitis in Ilorin.

All babies born in the University of Ilorin Teaching Hospital (UITH), Ilorin over a six-month period, January to June 1996, were screened for conjunctivitis using standard criteria. The use of breast milk eye-drops as traditional remedy for conjunctivitis by mothers was determined. Conjunctival swabs were taken from all neonates with conjunctivitis for laboratory evaluations. These included cultures, Gram's and Giemsa's staining. An assessment of inflammatory cellular reaction during the microscopic examination of the stained smear of specimen was done. Both clinical and laboratory staff had no knowledge of the correlation between clinical presentation and laboratory findings.

One hundred and twelve babies with neonatal conjunctivitis (NNC) were seen during the study period. Only 2 (1.8 percent) of the 112 babies had received breast milk (BM) eye-drops as traditional remedy for their conjunctivitis. No bacterium was isolated from the eye swab specimens from these 2 patients whereas at least one organism was isolated from the eye swab specimens of the other 110 patients. Of these 110 specimens, nine grew 2 isolates each while the remaining 101 samples grew an organism each. Significant acute inflammatory cells were present in all specimens except those belonging to the two babies who received breast milk eye-drops.

The rate of use of BM drops as treatment for conjunctivitis by UITH patients is very low. This may be a reflection of the calibre of individuals that utilise the facilities of UITH, hence this may not truly represent the prevalence of BM drops usage in the Ilorin township and its environ. Significant acute inflammatory cells were present in all specimens except those belonging to the two babies who received breast milk eye-drops. This finding would suggest

that lack of inflammatory cells and bacteria might be due to BM eye-drops, which those babies received. Hence, this finding may be attributed to the antibacterial activity of the human breast milk. This is in keeping with previous observations.⁴ With the advancement in medical knowledge and care, it may look like going back to the stone age to suggest the use of BM drops in NNC. With the growing population of nomadic people who stay far away from any medical facility, the growing number of religious bodies that reject any form of medical treatment and fast growing population of refugees beyond the available medical facilities, it may be good to keep this knowledge for use in case occasion permits. In conclusion, the use of BM drops may provide a ray of hope in the prevention of blinding conjunctivitis and its unwanted complications, which include low productivity and economic dependency.

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