LETTER TO THE EDITOR

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Cord separation time after 3% salicylic sugar dressing

Tempo di caduta del moncone ombelicale dopo medicazione con zucchero salicilico al 3%

Key words
Umbilical cord Salicylic acid

Parole chiave
Cordone ombelicale Zucchero salicilico

Dear Sir,

We would like to comment on the paper "Umbilical cord at birth: commonplace, traditions and EBM in family paediatrics" (Ital J Pediatr 2002;28: 271-4) [1], on the basis of our clinical experience with umbilical cord care.

For many years we treated umbilical cord years using 70 °C alcohol (until separation) in all neonates born in our Department. Umbilical cord separated after 15 days, and sometimes even after 25-30 days or more: in the latter cases it had to be removed by either ligation or sectioning. Persistence of umbilical stump required changing the dressing several times a day for quite a long time. Moreover, both the umbilical stump and the surrounding skin often showed signs of erythema, oedema, and abrasion and in some cases omphalitis; of course, this situation made the parents feel uneasy since they felt incapable of performing proper baby cord care.

Therefore, after a reappraisal of the paediatric literature on umbilical cord care, in September 2000 we began to medicate umbilical cords in our newborns using 3% salicylic sugar powder (SSP). The instructions for this particular dressing have been recently described by Branchi et al. [2]. In summary, once the baby has had a bath, the umbilical cord is medicated with a gauze bandage dampened with alcohol and kept in place by an elastic net. SSP medication is started after 12-24 hours; it consists of 3% salicylic acid and 97% saccarose (namely powdered sugar). Dressing consists of sprinkling stump with 5-10 grams of SSP and then wrapping it up with carbasus absorbents held in place by an elastic net. Such treatment is to be repeated twice or three times a day only until the umbilical stump separates; thereafter, the umbilical wound can be simply disinfected with alcohol or peroxide.

At the very beginning (until December 2000), we requested parental consent and treated only term neonates of appropriate gestational age who had no risk factors neither for haemorrhagic disease nor for perinatal infections (such as PROM > 18 hrs or a positive maternal swab). In this trial period we observed a remarkable reduction of umbilical cord separation time (4 to 5 days on average) without any side effects or increased infection rate; the only drawback was occasional and transient bleeding of the umbilical wound. Parents were quite happy with this new type of dressing and felt relieved about cord care, which was usually a matter of worry. In that period SSP was prepared by the local hospital chemist and given to the parents for the subsequent dressing after hospital discharge.

On the basis of these positive preliminary results, in January 2001 umbilical cord care by 3% SSP was extended to all healthy newborns; the way to change such a dressing is now taught to parents attending delivery preparation courses. After the confirmation of our positive preliminary results, we asked the local public chemists to prepare 3% SSP for patients who had been discharged.

Umbilical cords are critical in cases of neonatal emergencies, since they represent an important administration route for fluids and drugs. Therefore, given the short separation time using SSP, we decided to delay dressing time from 12-24 hrs to 36 hrs after delivery (in agreement with the medical literature). Moreover, in cases of low-for-gestational age or icteric newborns SSP medications are started only after clinical assessment; careful evaluation is warranted also for patients who have been admitted to the neonatal unit and might require umbilical infusion. This decision aims to prevent an excessively early umbilical stump separation in newborns who might need an emergency umbilical infusion for clinical problems. Indeed, umbilical cord separation occurs 7-8 days after birth on average because of this change in dressing time; we consider this a proper time both to meet clinical needs for emergency approaches and overcome parents anxiety for a late separation.

The results so far are encouraging: we have used 3% SSP in over 1000 newborns in our nursery and clinic without significant side effects.

Yours faithfully

References

[1] Lo Iacono G, Trizzino A, Buzzetti R. *Umbilical cord at birth: commonplace, traditions and EBM in family paediatrics.* Ital J Ped 2002;28:271-4.

[2] Branchi M, Bernardini E, Bordoni G, Siani A, Bonora G. *Colonizzazione batterica e tempo di caduta del moncone ombelicale: confronto tra trattamento con alcool e zucchero salicilico.* Ital J Ped 1998;24:994-1004.

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The Author's reply

Dear colleagues,
we are glad that our article on "Commonplace, traditions and EBM in family paediatrics" (Ital J Pediatr 2002;28:271-4) has stimulated so much interest, as shown by Dr. Guidi's letter. It is also gratifying that it induced other colleagues to write about their own experiences. EBM by no means disdains clinicians' experience; rather, it ambitiously aims to harmonize it with the best available knowledge and patient preferences (as claimed by Sackett and the founding fathers).
We are not neonatologists and therefore will not further dwell on cord treatment. Our paper aims to be a stimulus for regional pediatrics, but also to show how the practitioner – in this specific case, the family paediatrician – should be able to deal with any clinical problem with the aid of EBM, even if he or she lacks the specific expertise. One of the most important features of EBM is the fact that it allows all physicians to have great professional autonomy.
We hope that your experience can be made available to the whole scientific community, through the publication of peer-reviewed papers, and thus contribute to fill the current knowledge gap.
We thank you again for your interest in our contribution.

Cordially

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