



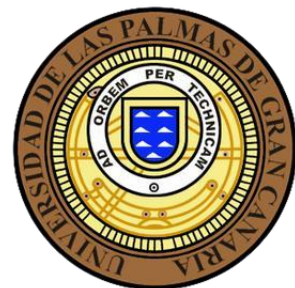
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FINAL
DEGREE
PROJECT

NEWBORN BATH

BIBLIOGRAPHIC REVIEW



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SUMMARY

Objectives: Determine what is the most appropriate way, according to the evidence, to bathe a newborn, determine the most appropriate temperature, identify the most appropriate frequency and recognize which products are the best for bathing a premature newborn and term.

Methods: A bibliographic search was carried out in the following databases and current evidence centers: Cochrane.org, Dialnet, Pubmed, for which search strategies and certain keywords were used, also applying to articles a series of inclusion and exclusion criteria, previously established.

Results: 18 studies were finally included in this review: of these definitively chosen documents, 7 are systematic reviews, 3 are cohort studies and 2 randomized study, 1 quasi-experimental study, 4 descriptive studies and 1 observational study.

Conclusions: There is no consensus on when to do the first bath, on the temperature at which the water should be, or on the use of the sponge during the bath. However, there is agreement with the use of chlorhexidine for the care of the umbilical cord, the use of emollients in premature and term infants with physiological dryness and with the use of soaps with neutral or slightly acidic Ph. On the other hand, the frequency of bathing for a premature and full-term newborn is different. Note that there is little evidence on how to perform the bath in premature newborns and controversies about their clinical practice in the newborn in general, which is why it is advisable to continue deepening this line of research.

Keywords: bathing, newborn, hospital, skin, nursing.

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1. INTRODUCTION

Justification

There is some controversy in the realization of the bath to the newborns (NB), in the different phases of their maturity, in the neonatology units. The skin characteristics of newborns differ according to their gestational age, which is why the necessary care must be individualized. Therefore, we rely on the evidence through a review of the scientific literature, to identify the appropriate way to perform the "newborn bath" care, taking into account the conditions of a preterm newborn and a full-term newborn.

Definition.

A neonate or newborn is one who is less than 28 days old. These first days suppose a greater risk of death for the child that is why, optimal care is needed to increase their chances of survival¹.

Newborns are named according to the weeks of gestation with which they are born^{2,3}:

- Extreme Prematurity (less than 28 weeks)
- Full-term infants (born between week 37 and 42)
- Post-term infants (those born after week 42).

Epidemiology

The total number of newborns and premature infants has decreased over the years. During 2015, the INE registered 420,290 deliveries, which means 65,837 births less than in 2009. Accordingly, premature births have been decreasing, since in 2009 the number of premature deliveries was 34,274 and in 2015 7,342 premature deliveries less.

According to INE data, the total of premature deliveries in 2015 was 6.48% (26,932). Of these premature deliveries, 3.76% (1015) were triggered before 28 weeks of gestation; 9.56% (2,575) between week 28 and 31, and between 32 and 36, 86.68% (23,345). The percentage of premature births, with respect to all births, has decreased slightly at the national level, being 7.05% in 2009 (34,274), and in 2015, 6.4% (26,932). However, it should be noted that in the Canary Islands, in 2014, total deliveries were 16,072, of which 7,18% (1,154) were premature⁴.

There are several factors that can trigger a premature birth. On the one hand, those related to pregnancy like⁵:

- Cervical insufficiency.
- Congenital anomalies of the uterus.
- Antecedents of premature births.
- Infections.
- Poor nutrition during pregnancy.
- Preeclampsia: high blood pressure and presence of proteins in the urine after week 20 of pregnancy.
- Premature membrane rupture.

On the other hand, there are other factors that increase the likelihood that labor will develop prematurely:

- Age of the mother (under 16 and over 35).
- Being African American.
- Lack of prenatal care.
- Low socioeconomic level.

Skin characteristics of a full-term NB

The skin is the most extensive organ of the body. Newborns are more likely to suffer an injury due to its constitution⁶.

The injured skin tends to lose heat and water producing a thermal and electrolyte imbalance. Also, there is an increase in caloric expenditure due to the effort made by the body for the recovery of injured skin⁷.

The skin of the term newborn has different characteristics than that of an adult. At the time of birth, the skin of the NB is covered by the vernix caseosa, which is the layer of protection in the intrauterine space and which allows the skin to mature and prevents it from macerating

with the amniotic fluid. The vernix begins to develop from the second trimester of pregnancy and decreases after week 38, since it dilutes in the amniotic fluid naturally and progressively⁶.

This layer is formed by 80% water and 10% respectively by proteins and fats. It has the ability to trap water and acts as a mechanical and chemical protector of the stratum corneum of the skin and has an antibacterial function. The presence of glutamine could favor the trophic stimulation of the maturation of the skin, as well as the adaptation of the skin to extrauterine life. The vernix caseosa favors the passage of the alkaline pH that the RN has at birth to acid PH that protects from infections, facilitated colonization by the natural flora. The OMS recommends since 2004 to maintain vernix as a natural protector ⁶. Dr. Ángeles Hernández Martín⁸ advises that it is advisable to leave this layer in contact with the skin of the newborn until it disappears on its own, which is why it suggests not bathing the child until the week after birth to keep the baby with its natural protection.

Anatomically the main layers that make up the skin are the epidermis, the dermis and the hypodermis⁷:

The epidermis is composed of a stratified flat epithelium and is the outermost layer of the skin (stratum corneum) that presents a lower degree of development in the NB. Among the cells themselves, there is a lesser degree of binding. In this layer, keratinization occurs, which is the maturation of the epidermis and occurs between the first 4 weeks of life.

Melanin, which is also part of this layer, is the pigment that determines the color of the skin and it is this that protects against the absorption of toxins and microorganisms.

The dermis is the layer below the epidermis and is composed of dense connective tissue (fibrous and elastic) of irregular disposition. In this layer there are the blood and lymphatic vessels as well as inflammatory cells and nerves.

The hypodermis or subcutaneous cellular tissue is the deepest layer of the skin and is constituted by a large number of adipocytes, separated from each other by bundles of elastic collagen fibers. Its maturation begins in the third trimester of pregnancy and is responsible for isolating, protecting internal organs and tissues, in addition to storing calories^{7,9}.

On the other hand, the layers of the skin are thinner, although the epidermis is only slightly thinner than that of an adult. The NB presents less hair and a weaker cohesion between the epidermis and the dermis⁶.

From the functional point of view, the skin of an NB has less capacity to excrete sweat and therefore, there is no adequate thermal regulation. Sebaceous production also decreases with the disappearance of maternal hormones and it does not recover until adolescence ⁶. Finally, the PH of the skin of a term neonate tends to be neutral although it turns acidic during the days after birth⁷.

Therefore, the five main functions of the skin are physical protection, regulation of temperature, sensory, immunological and its capacity for renewal

Skin characteristics of a premature NB

The skin of a premature newborn has different qualities compared to that of a full-term newborn. In the epidermis, the stratum corneum is diminished so that the permeability of the skin is increased. On the other hand, the acid mantle is also diminished, which helps the skin to have a bactericidal capacity against pathogens. All this favors transepidermal water losses, heat loss, the increase of the skin's ability to absorb chemicals and the increased risk of damaging the skin in an iatrogenic manner.

The dermis of a premature newborn has little collagen, which makes it easier for the edema. The edema produces the decrease of the blood perfusion and thus, greater risk of ischemic damage in the skin.

The union between these two layers is also diminished, so these NB are more vulnerable to skin lesions⁷.

The hypodermis has very special characteristics, mainly the lack or decrease of it due to the moment of gestation in which the tissue is deposited.

At 24 weeks of gestation the skin is shiny, moist and red due to the absence of subcutaneous fat between the dermis and the muscles. Therefore, in a premature newborn, depending on the gestational age in which it is found, it will present absences or a lower level of subcutaneous tissue development.

Preterm infants, especially those born less than 30 weeks gestation, lose heat through evaporation.

In summary, there are several factors that cause the difference in the skin of a term NB with a preterm BN. One element to note is that the skin of a premature RN accelerates its maturation

in contact with ambient air. Two weeks after the birth of a premature baby, their skin begins to develop at the same speed as that of a full-term newborn. However, in the extreme premature (<28 weeks) they may need up to 8 weeks to develop the protective skin barrier. .

Nursing care.

Taking into account the previously mentioned, what is to be considered in skin care in a premature RN is⁷:

- Maintain the integrity of the skin.
- Prevent chemical and physical injuries.
- Minimize the insensible loss of water.
- Maintain stable temperature.
- Prevent infection.
- Prevent against the absorption of toxic agents.

The Skin Care Guidelines for Newborns and Babies⁶, prepared by midwives, indicates that a full-term newborn is advised not to bathe before three days after birth, however, it should not be done under any circumstances before of 24 or 48 hours of life in order to protect the vernix caseosa and not to interfere in the physiological adaptation to the extrauterine environment. In case it is necessary to clean the remains of blood or meconium it has to be done in parts using a soft cloth.

In Spain, it is usual to bathe the NB to term in parts using a sponge or mitten, although normally the neonates usually feel good in an aquatic environment since it is a known medium and helps them to be alert and get used to their new life outside the mother's womb

This Guide indicates that "a baby gets dirty little" therefore, there are countries like England, which do not recommend the use of soap, mainly because of the characteristics of the skin. The skin of an NB is acidic and the pH of the water is alkaline and although there is a transient change during the bath, the skin returns to its natural state in a short time.

In the case of using a soap to perform the bath, those with a PH less than 7 are recommended since they do not penetrate so much into the skin of the NB.

The Guide for Newborn Care in Maternity Hospital 12 de Octubre¹¹ , advises that a bath of immersion should not be carried out during the first hours of life, since it eliminates casenic vernix and provides a greater risk of hypothermia. In addition, to eliminate the smell of amniotic fluid from the hands of the newborn that favors the start of breastfeeding. Thus, the cleaning of the remains of the head and the meconium can be carried out with warm water and a soft sponge without soap or with a minimum amount of neutral soap without additives. On the other hand, once the 48 hours have passed after the birth and if the NB has a temperature higher than 36.5 °C, it is allowed to start with the immersion bath with a sponge without soap or with a small amount and once it has finished drying without rubbing .

Also, warns that you should not use emollients, scented products or wipes because they tend to irritate, sensitize or dry the skin of the NB. They also advise against the removal of vernix and the administration of oils.

Finally, the protocol of the Cantabrian Health Service¹² , suggests that the bath should be performed at RN of more than 35 weeks of gestation and weighing more than 2,300 kg.

This protocol, previously mentioned, suggests that during the first 48 hours of life the immersion bath will not be carried out and that if necessary, the blood remains will be cleaned, but not routinely. To do this, use a soft sponge without soap or with a minimum amount of neutral soap moistened in water. Later, to dry a soft towel will be placed on the wet area and touches will be given without rubbing.

Once the 48 hours have passed, the protocol recommends the immersion bath if the temperature of the NB is not lower than 36.5°C. The cleaning should be smooth and without rubbing with a sponge without soap or with a minimum amount of this and that does not last more than 5 minutes. At the end of the bath, dry with a soft towel without rubbing.

In preterm infants, the bath depends to a large extent on the weight of this one. Taking into account the skin characteristics of a preterm infant, the cleaning should be different⁷.

In those that weigh more than 1,500 kg the bath should be made with warm water and neutral soap avoiding the daily use of soap. In preterm infants born before the 30th week of pregnancy, only warm distilled water should be used since the soap causes dryness,

desquamation and solutions of continuity that serve as a gateway for microbial agents during the two or three weeks of life. Distilled water is preferable because tap water can transmit pseudomonas.

The use of chemicals in the perineal region should also be avoided because they can cause irritation. In addition, alcohol or perfumes should be avoided.

The use of 0.5% chlorhexidine is recommended but in small quantities and for a short period of time and provided that after a cleaning with distilled water, due to the immaturity of the skin (stratum corneum) especially in premature extremes. The use of iodized solutions and hydrogen peroxide are not recommended because they produce skin lesions and also alterations in the thyroid gland^{7,9}.

Goals Clinical

question:

- What is the best way to perform a bath for a premature and full-term newborn?

Due to the different skin characteristics of an NB, specific care is required according to their maturity, taking into account the characteristics of premature babies, as well as extreme prematurity. That is why, because of the variability of care and the lack of protocols, a consensus is necessary.

General objective:

- Determine which is the most appropriate way, according to the evidence, to perform the bath to a term and premature NB.

Specific objectives:

- Determine the most suitable water temperature for the NB bath, depending on whether it is full term or premature.
- Identify the most appropriate frequency to bath the premature and full term newborn.
- Recognize which products are most suitable for premature and term NB.

2. METHODOLOGY

A search was made in the following databases and current evidence centers: PUBMED, Cochrane Library Plus and Dialnet. Taking into account the inclusion and exclusion criteria, a total of 694 articles were found.

Inclusion criteria.

We included those articles that are published from 2007 to the current year, written in Spanish, Portuguese and English and with free access.

Exclusion criteria

We excluded those articles that did not have full text, those that differed with the topic, and that did not correspond to the object of the study.

Table 1. Search strategy

Database	Keywords	Found articles	Articles found taking into account the filters.	Items finally selected.
Pubmed	New bornbathing AND Hospital	200	20	11
	New born skin AND nursing AND hospital	489	51	6
Dialnet	New born bathing AND hospital	2	0	0
	New born skin AND nursing AND hospital	3	0	0
Cochrane	New born bahing AND hospital	0	0	0
	Newborn skin AND nursing AND hospital	0	0	0

The methodology of this bibliographic review was initiated by making a search of the proper descriptors in health that will allow, along with the keywords and the use of the Boolean operators "AND", to form the search strategies.

Table 1. Key words used and Descriptors DeCS / MeSH Data Base

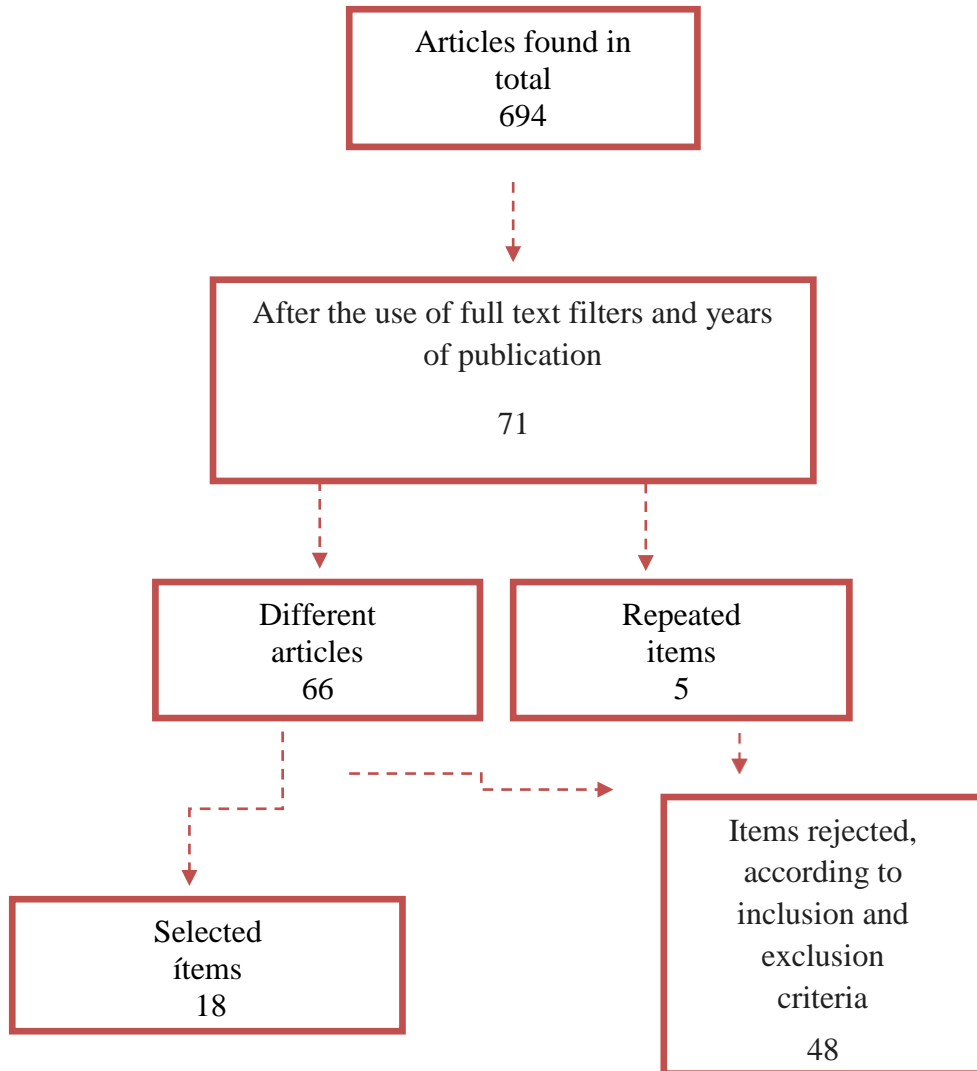
Keywords	Decs	Mesh Data Base
Bath	Baths	Bathing
Newborn	New born	New born
Hospital	Hospital	Hospital
Skin	Skin	Skin
Nursing	Nursing	Nursing

3. RESULTS

3.1 Flowchart

The flow chart shows the studies obtained after the bibliographic search carried out, in the aforementioned databases (table 1), and after applying the inclusion and exclusion criteria.

Figure 1. Flowchart



To make an analysis of the validity of the articles, which have been finally selected for the development of this review, the US Agency for Healthcare Quality and its corresponding classification of the recommendation grade according to the Scottish Intercollegiate Guideline Network has been used. said items ordered as mentioned above in the following table.

Table 3. Analysis of the results obtained in the literature review.

Autor	Artículo	Año	Resultados	Tipo de estudio	Nivel de evidencia	Grado de recomendación
Blume-Peytavi U.; Lavender T.; Jenerowicz D. et al	Recommendations from a European Roundtable Meeting on Best Practice Healthy Infant Skin Care	2016	Recommend water alone or with soap as it does not harm the skin's maturation process. Advises the use of emollients and oils for the physiological dryness of the skin. The soaps should have a ph of 5.5. Avoid hard surfactants such as lauryl and sulfate.	Systematic review	Ia	A
Khalifian, S.; Golden, WC.; Cohen, BA et al	Skin care practices in newborn nurseries and mother–baby units in Maryland	2016	Highlights the lack of consensus on the subject that is being addressed in this article, which highlights the need for protocols on skin care of the newborn.	Systematic review	Ia	A
Rehana A Salam, Tarab Mansoor, Dania Mallick et al.	Essential childbirth and postnatal interventions for improved maternal and neonatal health	2014	The hygienic care of the umbilical cord and the skin of the baby after delivery to reduce the risk of infections, have the potential to reduce neonatal deaths between 23 and 28%	Systematic review	Ia	A
Lawn JE, Davidge R, Paul VK, von Xylander S et al	Born Too Soon: Care for the preterm baby	2013	Defends the use of chlorhexidine for umbilical cord care	Systematic review	Ia	A
Onalo R	Neonatal hypothermia in sub-Saharan Africa: a review.	2013	Despite OMS recommendations to maintain the heat chain in the care of the newborn, hypothermia continues to be common. Early bathing is a risk factor for the baby.	Systematic review	Ia	A

Ullman A, Long D, Horn D, Woosley J et al.	The KIDS SAFE checklist for pediatric intensive care units.	2013	It establishes the importance of prevention and the use of Kidssafe verification since it has the potential to reduce errors of omission in the Intensive Care Units.	Systematic review	Ia	A
Fernandes JD, Machado MC, Oliveira ZN et al.	Children and newborn skin care and prevention.	2011	Routine bath is not harmful to the NB. There are no differences between the babies who received the bath one hour after birth and those who received it later. Recommends bathing in term NB twice a week and in premature babies every 4 days. About the temperature of the water, the authors comment that there is controversy, since some affirm that it must be between 37 and 37.5 degrees and others between 34 and 36 degrees. During the bath you have to focus your attention on the face, neck, folds and areas of the diaper. They defend that sponges should not be used. The use of emollients and soaps with neutral or slightly acid pH is recommended. In premature newborns, there are authors who recommend emollients and others who do not. The use of iodine and alcohol is discouraged. Finally, it recommends the use of chlorhexidine for the care of the umbilical cord.	Systematic review	Ia	A
Mendes BR, Shimabukuro DM1, Uber M et al	Critical evaluation of the pH of soap for children	2016	Recommend neutral or slightly acidic soaps.	Cohort study	Ila	B
Sacks E1 Moss WJ, Winch PJ et al.	Skin, thermal and umbilical cord care practices for neonates in southern, rural Zambia: a qualitative study.	2015	NB with VIH should be bathed immediately after birth. You should avoid bathing at night, and it is advisable to use chlorhexidine to care for the umbilical cord.	Cohort study	Ila	B
Covas M del C, Alda E, Medina MS, Ventura S, et al	Alcohol versus bath and natural drying for umbilical cord care of term infants: a prospective randomized clinical trial	2011	It recommends neutral soap and the natural drying of the umbilical cord, although this practice will increase the colonization rate, it did not modify the risk to the NB of suffering skin infections.	Cohort study	Ila	B
Ayyildiz T, Kulakci H, NiyaziAyoglu F	The Effects of Two Bathing Methods on the Time of Separation of Umbilical Cord in Term Babies in Turkey	2015	Sponge bath until the umbilical cord detaches.	Quasi-experimental study	Iib	B

Amer, M.; Diab, N.; Soliam M. et al	Neonatal skin care: what should we do? A four-week follow-up randomized controlled trial at Zagazig University Hospitals.	2017	The proper care and good hygiene of normal and mature neonatal skin are essential to maintain the function of the skin barrier. It recommends the use of emollients in the bath to minimize transdermal water loss, heat loss and percutaneous absorption of toxins. You should use cleansers especially for the skin of the RN, neutral pH soaps to avoid irritant and allergic dermatitis	Randomized study	IIb	B
Lavender T, Bedwell C, Roberts SA et al	Randomized, controlled trial evaluating a baby wash product on skin barrier function in healthy, term neonates.	2013	It does not detect differences between the product of the NB and the water. Defend the soap with a PH of 5.5. The products must be properly tested for use in babies.	Randomized study	IIb	B
Dornfeld, D.; Rubim, Pedro EN	The health team and the safety of the mother-baby binomial during labor and birth.	2015	The nurse plays a differential role in the team for the realization of a safe neonatal care.	Descriptive study	IIIa	C
Dhingra U.; Gittelsohn J.; Suleiman AM	Delivery, immediate newborn and cord care practices in Pemba Tanzania: a qualitative study of community, hospital staff and community level care providers for knowledge, attitudes, belief systems and practices	2014	Importance of keeping the child warm and delaying the bath	Descriptive study	IIIa	C
Gul, S.; Khalil, R.; Yousafzai, MT. Et al	Newborn care knowledge and practices among mothers attending pediatric outpatient clinic of a hospital in Karachi, Pakistan	2014	Health education can improve mothers' knowledge of newborn care	Descriptive study	IIIa	C
Santos SV, Costa R	Treatment of skin lesions in newborn children: meeting the needs of nursing staff].	2014	There is an urgent need for staff to be more knowledgeable about the treatment of skin lesions to provide safer care for the NB, and would also support the authorship of the nurses to provide that care.	Descriptive study	IIIa	C
Sobel HL, Silvestre MA, Mantaring JB Et al	Immediate newborn care practices delay thermoregulation and breastfeeding initiation.	2011	The immediate interventions of attention to the NB are below those recommended by the OMS.	Observational study	IIIa	C

4. DISCUSSION

Fernandes JD¹³ and his colleagues state that routine bathing is not harmful to the RN, like Amer¹⁴ and collaborators who state that the proper care and good hygiene of normal and mature neonatal skin are essential to maintain the function of the body. skin barrier.

In the study, Fernandes JD¹³ states that there are some authors who believe that the first bath should be carried out when the temperature of the newborn is stable, except in RN with HIV that the bath should be immediate, according to Sacks E¹⁵. Onalo¹⁶, in his article on hypothermia in Africa, argues that early bathing in babies can cause a decrease in temperature. Also, Dhingra U¹⁷ and partners, certify the importance of keeping the child warm and delaying the bath. On this matter, the Guide of Midwives⁶ defends that the first bath of a full term RN should not be before three days and under no circumstances before 24 or 48 hours of life for the protection of vernix. On the other hand, the protocol of the Hospital 12 de Octubre¹¹ does not advise bathing during the first hours of life due to the risk of hypothermia and to protect, also, the vernix caseosa.

Regarding the frequency in which a baby should be bathed, Fernandes JD¹³, advocates that the bath in premature babies be every four days. Thus, as in full-term infants, it is recommended that they bathe twice a week. For his part, Sacks E¹⁵ states that you should avoid bathing at night.

Regarding the temperature of the water, the authors comment that there is controversy, since some affirm that it should be between 37 and 37.5 degrees and others between 34 and 36 degrees¹³.

Fernandes JD¹³, and collaborators, advise that during the bath you have to focus your attention on the face, neck, folds and areas of the diaper. They affirm that it is better to bathe with water without using sponges since this produces an increase in the loss of transdermal water and hydration and a decrease in the stratum corneum. However, Ayyildiz T¹⁸ advises bathing with a sponge until the umbilical cord comes off, although his article has less evidence. The protocol of the Hospital 12 de Octubre¹¹, advises the use of disposable sponges. Also, the protocol of the Cantabrian Health Service recommends its use.

After bathing, emollients can be used for the dryness and protection of the stratum corneum and the skin barrier¹³. Amer¹⁴ and collaborators declare on this aspect that the use of emollients is recommended, like Blume¹⁹ and collaborators who also defend its use.

Regarding the use of oils during the bath, Fernández JD¹³ and other authors such as Blume¹⁹ support its use for the physiological dryness of the skin, but in small quantities. In contrast, the Hospital Guide 12 de Octubre¹¹ does not recommend its use, although this guide is being revised at this time.

As for the soaps, all the authors reveal that they must be liquid, soft, without fragrance, with neutral or slightly acid pH for the protection of the cutaneous barrier^{13,14,20,21}. Both Guides named above, advocate the use of soap with slightly acidic or neutral pH^{6,11,12}. On the other hand, Blume¹⁹, suggest that the bath can be made with water alone or soaps with a Ph of approximately 5.5, avoiding hard surfactant products such as lauryl and sodium sulfate. Lavender²² and colleagues also do not detect differences between newborn products and water. They also defend the use of soaps with pH of 5.5.

Salam RA²³, reveals that the hygienic care of the umbilical cord and the baby's skin after delivery to reduce the risk of infections have the potential to reduce neonatal deaths. In the study, carried out by Sacks E¹⁵ and collaborators in Zambia, it was revealed that for the care of the umbilical cord the use of chlorhexidine is appropriate, as Fernandes JD¹³ also supports this fact and also adds that many products designed for the use of Children are harmful to the skin of an RN. Covas²¹, on the contrary, defends the natural drying of the umbilical cord since in its study it was demonstrated that although this practice increased the colonization rate, it did not modify the risk of cutaneous infections.

In the premature newborn, Lawn²⁴ JE and collaborators declare that for the care of the umbilical cord the use of chlorhexidine is also advised. Fernandes JD¹³, strongly discourages the use of alcohol in a premature newborn because it can produce necrosis in the skin. In preterm infants according to the Nursing book in the Neonatal Intensive Care Unit⁷, the use of chlorexidine is also recommended. It also does not recommend the use of iodine since it produces problems in the thyroid gland¹³. Collect this information in the book named above⁷.

On the other hand, in premature infants, Fernandes JD¹³, defends that the use of emollients, according to some authors, can be beneficial for their skin since it helps to maintain the water-electrolyte balance. However, other authors named Fernandes JD¹³ disagree with this statement because they claim that the use of emollients prophylactically increases the risk of nosocomial diseases in premature babies. Others, on the other hand, defend that some types of emollients. Lawn²⁴ for its part recommends, in a more recent study, that the use of this type of products, especially sunflower oil, since it reduces water loss, dermatitis and sepsis.

Another element that the authors also highlight, such as Gul S²⁵, is the influence of tradition and culture in the care of the newborn, this author, believes that health education can improve the knowledge of mothers with regard to newborn care. In this context Ullman A²⁶ defends the prevention and use of Kids safe verification since it has the potential to reduce errors of omission in the Intensive Care Units.

Regarding the importance of healthcare professionals in the care of the RN Sobel HL²⁷, in its study carried out in 2011, it shows that the performance in the immediate interventions of the RN is below those recommended by the WHO, thus depriving the neonate of the necessary protection against infections and death. In 2014, Simone V²⁸ states that there is an urgent need for staff to have more knowledge about skin injuries, which would provide safer care for the RN. It also supports the autonomy of nurses to provide adequate neonatal care. More recent studies like that of Dornfeld²⁹ in 2015 maintain that the nurse plays a differential role in the team for the performance of a safe care

Finally, S Khalifian³⁰ states in his review the lack of consensus on the subject that is being addressed in this article, which highlights the need for protocols on the care of newborn skin.

5. CONCLUSIONS

- There is no consensus on when to do the first bath, but in doing it avoiding hypothermia, recommended by some authors to do it when the temperature of the NB is stable, and protecting the vernix caseosa.
- There is no consensus on the temperature at which the water should be, oscillating between 34 and 37 and half degrees.
- NB with VIH must be cleaned immediately after birth.
- The bath of a full-term NB is recommended to be performed twice a week.
- The bath of a premature baby is recommended to be carried out every 4 days.
- There is no consensus in the use of sponge during the bathing, but articles with a higher degree of recommendation discourage its use.
- The use of emollients is recommended in term and premature infants, for the physiological dryness of the skin, but in small quantities.
- The authors agree that the soap used must be a neutral Ph.
- The use of chlorhexidine is recommended for cord care, both at term and in premature infants.
- Highlight that there is little evidence on how to perform the bath in premature newborns and controversies about their proper clinical practice in the newborn in general.

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7. ANNEXED



Las Palmas de Gran Canaria a 28 de Mayo del 2018.

Yo, M^a Dolores Quintana Santana comunico que la alumna Dña Nerea Sosa Rodríguez con DNI 45345760H refiere estar interesada en participar en la actualización del protocolo del " Baño del Recién Nacido" del Servicio de Neonatología del HUMIC cuando finalice su trabajo de fin de grado aportando las fuentes utilizadas para la elaboración de dicho trabajo.

Para conste a los efectos oportunos firmo el presente escrito

Atentamente:

M^a Dolores Quintana Santana
(Supervisora de Neonatología)

