

Comparison of Wound Dehiscence and Parent's Satisfaction between Spoon/Syringe Feeding and Breast/Bottle Feeding in Patients with Cleft Lip Repair

Darawan Augsornwan MPH*, Palakorn Surakunprapha MD**,
Pantamanas Pattangtanang BNS*, Sumalee Pongpagatip MA***,
Kamonwan Jenwitheesuk MD**, Bowornsilp Chowchuen MD**

*Surgical and Orthopedic Department, Division of Nursing, Srinagarind Hospital, Faculty of Medicine,
Khon Kaen University, Khon Kaen, Thailand

**Department of Surgery, Faculty of Medicine, Khon Kaen University, Khon Kaen, Thailand

***Outpatient Department, Division of Nursing, Srinagarind Hospital, Faculty of Medicine, Khon Kaen University,
Khon Kaen, Thailand

Background: Cleft lip and cleft palate are the most common craniofacial anomalies affecting approximately 2.49 of every 1,000 children born in North-east of Thailand. Srinagarind Hospital has 100-150 cases of cleft lip each year. Children with cleft lip and palate need surgical procedures as soon as possible. After lip repair the normal recommendation is not using bottle or breast feeding for 2 weeks to avoid tension at the sutured area during sucking and possible cause of wound dehiscence. So this is quite complicated for the parents, and patients feel frustrated, cry, and move their head around, because of hunger which cannot easily be satisfied. Previous research found that sucking does not cause wound dehiscence, but mentioned no detail about severity of cleft.

Objective: Primary objective is to compare surgical wound dehiscence between breast feeding/bottle and spoon/syringe feeding after lip repair.

Material and Method: This is an experimental study: non-inferiority trials study. The population is the patients with cleft lip who underwent lip repair in Inpatient Department 3C, Srinagarind Hospital, Faculty of Medicine, Khon Kaen University. The study period is during May 2010-February 2013. The total sample size in the present study is 192 participants, 96 cases breast/bottle feeding, 96 cases spoon/syringe feeding. The wound dehiscence rate was analyzed by Z-test. Parents' satisfaction is a qualitative data and was analyzed through content analysis.

Results: No statistical significant difference between breast/bottle and spoon/syringe groups (p -value = 0.320, 95% confidence interval -0.031-0.010). Parents were more satisfied to feed children by breast/bottle and patients were more relaxed with breast/bottle feeding.

Conclusion: Breast/bottle feeding and syringe/spoon feeding have the same result on the surgical wound. Breast/bottle feeding are not causes of wound dehiscence.

Keywords: Breast/bottle feeding, Wound dehiscence, Cleft-lip repair

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Cleft lip and cleft palate are the most common craniofacial anomalies, affecting approximately 2.49 of every 1,000 children born in northeast Thailand⁽¹⁾. Srinagarind Hospital has 100-150 cases of cleft lip each year⁽²⁾. Unexpected birth of infants with cleft lip and cleft palate has psychological effects for parents and some parents feel nervous with their child and also can

have marriage problems⁽³⁾. Children with cleft lip and palate need surgical procedures as soon as possible. When children go to hospital to receive surgery, the pain, limited activity and food are very different from normal life⁽⁴⁾.

After lip repair in the past, bottle and breast feeding was typically restricted⁽⁵⁾. The most important thing after lip repair is avoiding tension at the surgical area⁽⁶⁾. In 1987 there was a study about the effect of early repair and breast feeding on the outcome of the cleft lip surgery. They found that bottle and breast feeding does not cause any wound problem after lip repair⁽⁷⁾. After that study further studies about bottle/

Correspondence to:

Augsornwan D, Surgical and Orthopedic Department, Division of Nursing, Srinagarind Hospital, Faculty of Medicine, Khon Kaen University, Khon Kaen 40002, Thailand.
Phone: 08-1471-2578, Fax: 043-244-703
E-mail: darawana@hotmail.com

breast feeding show that it is not a cause of wound dehiscence^(5,8-10). So after lip repair some countries changed the protocol to unrestricted bottle/breast feeding.

In Thailand normal recommendation is not using the bottle or breast feeding for 2 weeks after lip repair to avoid tension at the sutured area and possible attrition during sucking^(11,12). So this is quite complicated for the parents to deal with, and patients feel frustrated, they cry, move their head around and need more pain killers, because of hunger, but cannot eat easily and are not used to that protocol. The question is why patients with cleft repair in Thailand are not allowed breast/bottle feeding. This question can be answered that because the surgeon is not sure if the detail from previous study is applicable to patients with cleft lip repair in Thailand.

When patients comeback from the operating room after lip repair and they wake up, cry and try to get milk from their mother's breast and they are used to breast or bottle feeding at home they will refuse when nurses or their parents try to feed them with spoon, syringes, cup, they will move their head around. It takes a long time to feed them like that. This is from the authors 21 years experience with patients who have cleft lip repair. On the other hand parents feel it is complicated for them to take care of their children. So if the authors can study more about safety of breast/bottle feeding for patients with cleft lip repair in Thai patients then can have a standard of care about feeding after lip repair. This can reduce patients crying, irritability, enable them to get more milk, and reduce the need for pain killers⁽¹⁰⁾. This makes it easier for parents to take care of their children, and other patients nearby feel more comfortable.

Literature review

Cleft lip and cleft palate

Cleft lip and cleft palate is the most common congenital craniofacial anomaly, these abnormalities affect about 1 in every 500-550 births. It occurs frequently in association with other anomalies⁽¹³⁾. In Thailand affecting approximately 2.49 in every 1,000 births⁽¹⁾. Cleft lip and cleft palate occurs early in pregnancy. The tissue that forms the lip ordinarily fuses by 5 to 6 weeks, and the palate closes between 7 and 9 weeks of gestation⁽¹³⁾. The type of clefting varies with the embryonic stage when its development occurred. There are several types of cleft lip, ranging from a small groove on the border of the upper lip to a larger deformity that extends into the floor of the nostril and

part of the maxilla (upper jaw bone)⁽¹⁴⁾.

Cleft lip is classified as incomplete or complete cleft lip. A cleft that involves only the soft tissue is incomplete cleft, a cleft that affects both bony and soft tissue is complete cleft. The width of the cleft increases from the free border of the lip to the anterior palatine foramen (front to back)⁽¹⁵⁾ and is also classified as unilateral or bilateral cleft lip.

Lip repair is the most common method to correct the problem. The goal of this surgery is to fix the separation of the lip. Sometimes, a second operation is needed⁽⁴⁾. There are several operative techniques for cleft lip repair. The Millard rotation advancement (R-A) technique is the most widely accepted form of repair⁽¹⁴⁾. Srinagarind Hospital also uses this technique.

During the surgery and for a short time afterwards patients will have an intravenous catheter to provide fluids until they are able to drink. They will be irritable after surgery, experience pain and crying, so physician may prescribe pain medications to prevent crying. Parents should try cuddling, rocking and anticipation of needs, because crying may cause tension on suture line^(6,13,16). Patients upper lip and nose will have stitches. It is normal to have swelling, bruising, and blood around the stitches⁽³⁾. It is sometimes necessary to use arm restraints to stop their hands from touching and rubbing the suture line⁽¹³⁾.

Feeding

Usually infants get milk from breast feeding or bottle feeding by sucking, to provide nourishment for growth and development. It is very important for infants to obtain adequate nutrition. The physical act of sucking involves using the jaw, tongue, gum, palate and lips⁽¹⁷⁾. There are 3 reflexes for feeding, rooting, sucking, and swallowing reflex. Rooting reflex is when following stimulation of the skin around the mouth infants will open their mouth, and move their head toward the stimulator, so when the nipple touch the lips infants will open their mouth, lips flanged to seal the gap of nipple, areola and mouth, the gum put on the areola, tongue beneath the areola. The mechanics of sucking start when infants move the posterior tongue down and press nipple and areola against hard palate then intra oral vacuum increased. The milk will transfer when jaw and tongue move up and down. This is followed by the swallowing phase^(18,19).

Effective feeding supports weight gain of infant to get ready for operation. Sucking is a very important issue as it is not only a source of food but it is comforting for infants⁽²⁰⁾. The feeding process

provides bonding between mother and child as well as oral motor skill development⁽¹⁷⁾.

As a result of the pain and the location of the surgery, patients may not eat and drink as usual. Postoperative, in Thailand physicians do not allow breastfeeding or bottle feedings, only spoon/syringe/medical dropper placed on for 2 weeks after lip repair to avoid tension at the sutured area during sucking^(3,11,12). So after lip repair patients often cry because of not being used to syringe/spoon feeding, can take less milk and not feel comfortable as breast/bottle feeding, another reason, sucking is response to the patients' need⁽¹⁶⁾.

Wound dehiscence

Wound dehiscence is a surgical complication that results from poor wound healing⁽²¹⁾. The surface layers of the surgical wound separate or the whole wound splits open⁽²²⁾. It is the unintentional reopening of a wound. This reopening usually occurs between 7 and 10 days post surgery⁽²³⁾.

Causes of dehiscence

Wound dehiscence varies depending on the kind of surgery and type of cleft. The generalized causes are infection at the wound, pressure on sutures, sutures too tight, injury to the wound area, poor knotting or grabbing of stitches, trauma to the wound after surgery. Also weak tissue or muscle at the wound area, incorrect suture technique used to close operative area, poor closure technique at the time of surgery^(23,24), severe vitamin C deficiency (vitamin C is required to create strong cross links between collagen fibers). An inability to make these cross links leads to weak scar tissue^(21,22).

Risk factors

The factors increasing likelihood of developing wound dehiscence are overweight, increasing age, poor nutrition, diabetes⁽²⁴⁾. A possible risk of dehiscence are poor blood supply to the wound, inflammation, use of medications such as anti-inflammatory agents, steroids that inhibit proper wound healing. Often, wound dehiscence occurs from physical stress on the wound^(21,22,24), the size, location, non-compliance with post-operative instructions and type of the wound impacts⁽²¹⁾.

Symptoms

Symptoms of wound dehiscence include redness or swelling of the skin around the wound, broken sutures, separation of the wound edges, and

additional symptoms may include fluid draining from wound, or tissue protruding from the wound^(22,24). Signs and symptoms can include bruising of the wound site, site pain, skin inflammation, wound discharge and skin breakdown around the wound area after surgery⁽²³⁾.

Wound dehiscence rate in patients with lip repair varies from 2-8%⁽²⁵⁾.

Parent's satisfaction

Satisfaction has many meanings "1) Satisfaction is a feeling of pleasure of Achievement, 2) The action of fulfilling a need, desire, demand, 3) The state of being certain or convinced about, 4) A thing that gives pleasure and happiness, 5) An acceptable response to a complaint, or an apology or revenge for an insult to one's honor or reputation⁽²⁶⁾".

The concept of satisfaction

Satisfaction related to expectations and characteristic. Patient satisfaction defined as the individual's positive evaluations of distinct dimensions of health care⁽²⁷⁾. Assessment of patients' satisfaction with the process of care is important as a measure of the quality of care and to identify areas in the process that need improvement⁽²⁸⁾.

Expectations

Expectation has a fundamental role in expressions of satisfaction. Satisfaction is related to the perception of the benefits of care and the extent to which these meet the expectations. In the nursing context, patients' satisfaction can simply be equated with quality of nursing care⁽²⁹⁾. The different levels of satisfaction may indicate different perspectives on nursing care quality rather than different levels of satisfaction with the same experience⁽³⁰⁾. The relationship between expectations and satisfaction can conclude that "lower expectations" tend to be more satisfied⁽³¹⁾.

Characteristics

Satisfaction with health care may be depend on variables such as social class, age, marital status, gender, socioeconomic demographic characteristics are a minor predictor of satisfaction⁽³²⁾.

Research question

Does breast/bottle feeding carry non-inferior rate of wound dehiscence compare to spoon/syringe feeding in patients with cleft lip repair in Srinagarind Hospital?

Objectives of the study

Primary objective: To compare surgical wound dehiscence between breast feeding/bottle and spoon/syringe feeding after lip repair.

Secondary objectives: To evaluate parents' satisfaction between breast/bottle feeding and spoon/syringe feeding after lip repair.

Material and Method

Sample size calculation

The present study is a non inferiority randomized controlled trial. The outcome is the difference between two proportions. The primary outcome is wound dehiscence. So, the sample size use the formula as follow:⁽³³⁾

$$n = \frac{2 \{ \pi (1-\pi) \} (Z_{1-\alpha} + Z_{1-\beta})^2}{\delta^2}$$

n = Number of sample size in each group
 α = Type 1 error = 0.05; $Z_{\alpha} = 1.64$
 β = Type 2 error = 0.20; $Z_{\beta} = 0.84$ Power = $(1-\beta) = 0.80$
 π = Expected event rate
 δ = Degree of acceptable non-inferiority between spoon/syringe and breast/bottle feeding

The sample size require in each group are calculate base on the following assumption:

The wound dehiscence rate of spoon/syringe feeding is 2% (Data from Nursing Division, Faculty of Medicine, Khon Kaen University in 2007).

Degree of acceptable non-inferiority between spoon/syringe and breast/bottle feeding is 5%.

Therefore $n = \frac{2 \{ (0.02)(0.98) \} (1.64+0.84)^2}{(0.05)^2} = 96$

Therefore this study needed sample size = 96

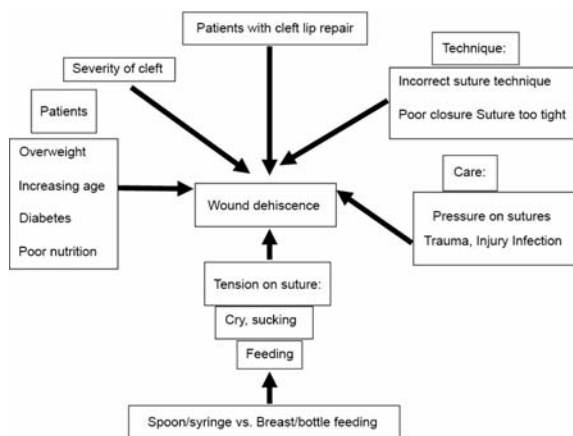


Fig. 1 Conceptual framework.

cases/group.

The study was conducted with Inpatient Department, 3C ward in Srinagarind Hospital Khon Kaen, Thailand during May 2010-February 2013. Parents of patients with cleft lip and palate who undergoing lip repair were randomization into one of two groups using computer-generated by block of eight randomization to spoon/syringe feeding and breast/bottle feeding group. The sample size was 96 cases/group. Inform consent was obtained from parents who agreed to participate in the present study.

Inclusion criteria: Patients with complete cleft lip, patients with cleft lip and palate. Age of 3-6 months, new case and parents' full awareness.

Exclusion criteria: Patients with cleft lip and palate and other anomalies.

Measurement of the outcome

1. Demographic data questionnaires selected for study were age, sex, weight, Hemoglobin severity of cleft lip, type of surgery, surgeon, parents age, marital status, income and education. The data were collected after patients return from operating room.

2. Wound dehiscence measured by registered nurse who was well trained about wound assessment using evaluation surgical wound form. Use 1 score if presented with that item and 0 if not presented. Measure 3 period of time, which is immediately after surgery (after first feeding), 1st day after post operation and 2 week after post operation.

3. Parents satisfaction was measured by semi structure questionnaires on the first day after operation (on discharge day) by researcher. Observation of parents' reaction while taking care of their children,

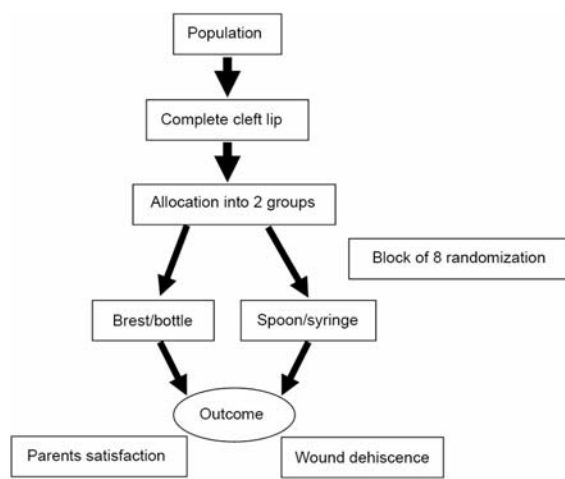


Fig. 2 Study flow.

feeding and patients' reaction while feeding. Observe 2 period of time, which are first time of feeding and 1st day after post operation.

Intervention

Patients with cleft lip or cleft lip and palate who were admitted in 3C ward, Srinagarind Hospital received adequate verbal and written information regarding the present study and information about the purpose, process, disadvantages and advantages in the present study. After they agree to participate in the present study, they were allocated into spoon/syringe feeding group and breast/bottle feeding group. For spoon/syringe feeding group nurses provided syringe with soft rubber tube attached at the end or spoon and trained mother or caregiver to use it with their child by VDO in first day. Breast/bottle feeding group nurses trained mother or caregiver about feeding their child by VDO. All patients received same standard of nursing care.

Random allocation technique

After parents agree to participate in the present study, they were allocated into spoon/syringe feeding groups and breast/bottle feeding groups using computer-generated by block of eight randomizations. The allocation ratio is 1:1. The allocation sequence generated by computer using STATA 10 software. Based on the obtained schedule, the number of sealed envelopes is equal to that required. Blocks were prepared and labelled. Each envelope contains the corresponding sealed allocation cards that will allocate treatment to patients, the staff who prepare the randomized scheme will not be involved in the trial. The allocation schedule will be concealed until the end of trial.

Data analysis

There are two main parts of analysis, describing characteristics of the patients and analysis for answering the research question. Primary outcome analysis, wound dehiscence rate in each group was presented as number and percentage the hypotheses test using Z-test report p-value. Furthermore to evaluate the magnitude of association, reported 95% CI. P-values <0.05 defined as statistical significance. Secondary outcome analysis, parent's satisfaction, a qualitative data was analyzed through content analysis.

Ethical consideration

This study was approved by the Ethic

Committees on Human Rights Related of Khon Kaen University.

Results

Characteristics of the patients and operative data

The sample population were patients with cleft lip and cleft palate 121 cases are male (58.1%), 78 cases (40.6%) were patients with incomplete cleft lip, 24 cases (12.5%) were patients with complete cleft lip, 60 cases (31.2%) were patients with unilateral complete cleft lip and palate, 30 cases (15.6%) were patients with bilateral complete cleft lip and palate. 115 cases (59.9%) had cheiloplasty. 77 cases (40.1%) had cheiloplasty and primary rhinoplasty, the detail shown in Table 1.

Comparison wound dehiscence

The surgical wound was observed to evaluate the swelling, bleeding, skin inflammation and wound separation at immediate postoperative after first feeding (D_0), first day after surgery (D_1) and 14 days after surgery (D_{14}). The results of the present study show no statistical significant difference between breast/bottle and spoon/syringe groups (Table 2).

Follow-up ranged from 3 months to 1 year. There was one partial lip dehiscence 2 weeks after lip repair in patients with spoon/syringe feeding due to a fall not because of feeding protocol. Two cases had skin inflammation and discharge from wound 5 and 7 days after surgery in patients with spoon/syringe feeding.

The present study observed the reaction of parents and patients while feeding and we found in spoon/syringe group when parents put syringe/spoon to the patients mouth they cried and move their head around and then accept the feeding but cry again while the parents get more milk to put in syringe/spoon causing worry to the parents. Sometimes 3 people can be involved trying to feed the patient, mother, father and grandmother. The breast/bottle feeding group when parents put bottle/breast to patients' mouth they try to suck milk and cry a few times before successful sucking. The parents were more relaxed for feeding with breast/bottle feeding.

Parents satisfaction

From observation the authors found mothers in the breast/bottle feeding group hold patients and feed them similar as before, they look a little worried if their child is feeling pain or what will happen with the wound, but after the child starts sucking milk more and more they feel relaxed and happy. The second day after

Table 1. Baseline characteristics of the patients and operative data

Characteristics	Breast/bottle group	Spoon/syringe
Gender (n, %)		
Male	60 (62.5)	61 (63.5)
Age (month, mean)	4.40	4.20
Weight (kg, mean)	6.40	6.20
Hemoglobin (mean)	10.96	11.25
Surgical time (minute, mean)	65.93	69.40
Diagnosis (n, %)		
Incomplete cleft lip	37 (38.5)	41 (42.7)
Complete cleft lip	13 (14.0)	11 (11.5)
Unilateral complete cleft lip and palate	31 (32.0)	29 (30.2)
Bilateral complete cleft lip and palate	15 (15.6)	15 (15.6)
Post operative procedure (n, %)		
Cheiloplasty	51 (53.1)	64 (66.7)
Cheiloplasty and primary rhinoplasty	45 (46.9)	32 (33.3)
Surgeon (n, %)		
Staff 1	53 (55.2)	66 (68.8)
Staff 2	22 (22.9)	18 (18.8)
Staff 3	21 (21.9)	12 (12.2)
Parents data age (year, mean)	27.40	26
Sex		
Female	92 (95.8)	94 (97.9)
Education		
Primary school	19 (19.8)	11 (11.5)
Secondary school	60 (62.5)	68 (70.5)
Bachelor's degree	17 (17.7)	17 (17.7)
Income (baht/year, mean)	185,410	153,256

Table 2. Evaluation of the surgical wound

Item observation	Time	Breast/bottle feeding				Spoon/syringe feeding				p-value	95%CI
		Yes		No		Yes		No			
		n	%	n	%	n	%	n	%		
Swelling	D ₀	10	10.41	86	89.6	12	12.5	84	87.0	0.158	
	D ₁	14	14.56	82	85.4	13	13.5	83	86.5	0.320	
	D ₁₄	1	1.04	95	98.9	2	2.1	94	98.0	0.320	
Bleeding	D ₀	5	5.20	91	94.8	2	2.1	94	98.0	0.083	
	D ₁	0	0	96	100.0	0	0	96	100.0		
	D ₁₄	0	0	96	100.0	0	0	96	100.0		
Skin inflammation	D ₀	0	0	96	100.0	0	0	96	100.0	0.320	
	D ₁	0	0	96	100.0	0	0	96	100.0		
	D ₁₄	0	0	96	100.0	2	2.1	94	98.0		
Wound dehiscence	D ₀	0	0	96	100.0	0	0	96	100.0		
	D ₁	0	0	96	100.0	0	0	96	100.0		
	D ₁₄	0	0	96	100.0	1	1.0	95	99.0	0.320	-0.031 -0.010

operation they feel confident to feed their child. For the spoon/syringe feeding group, the mothers hold the child while the father tries to fill milk in spoon/syringe to give to them, but they cry and move their head around. So parents try to hold and rock them and try to feed again, they look worried, don't know what to do in that situation, try to feed their child many times, the child just getting milk a little each time. In the second day after operation they are still worried about how to feed their child. Nurses will encourage, try to empower parents about feeding. The authors also interviewed parents about how they feel and if satisfied about feeding. This is some of the parents' opinions.

Parents' opinion in breast/bottle feeding group

"I was very worried about how to feed my child after operation, because I heard that it's not allowed for my child to suck milk; so I bought a machine to get milk from my breast to feed my child by spoon or syringe, but after my child was admitted, the nurse asked me if I agreed to be a sample for their research about breast/bottle feeding and spoon/syringe feeding. I decided to be the sample after the nurse said my child was the breast/bottle feeding group so I can give breast feeding for my child. I am very happy with that and after my child came back from operating room I can do breast feeding for her; it's very good and she can suck milk same as before operation, I am very happy with this".

"I felt very good to give my son breast feeding same as before operation".

"I was a little worried the first time my son sucked milk from bottle, frightened wound can separate, but after that everything is good. Day 1 after operation he can suck milk same as before operation and did not cry because of feeding".

"To allow my son sucking from breast is very good for me and my son; before operation I tried to feed him with spoon/syringe but he can't accept and cried so I was worried about what can I do in that situation after operation. Now every thing is good".

"She can suck milk same as before operation, I was a little worried at the first time, but when she can suck and get milk I know she did not have pain because of sucking. I am very happy with this".

Parents' opinion in spoon, syringe group

"She does not used to feeding with the spoon/syringe and can drink a little bit each time, so she cries more often because of hunger and doesn't like the way I feed her".

"She doesn't like it; she wanted to suck the milk, because before she sucks milk from bottle".

"Normally he sucks milk from bottle about 3 ounce /time, but when we feed him by syringe he not happy and needs to get the milk more quickly, so he cry when I can't feed him as quick as he need".

"It's hard to feed him with spoon/syringe because we never feed him like that before, so he just wanted to suck but he cannot and that made him cry and move his body and legs round and round".

"I used to train him about feeding with spoon so he can get milk by this way".

"Nurse told us to feed my child with spoon/syringe and she likes syringe so we feed her with syringe about 2 week before operation, so after operation she can get milk by syringe".

"I didn't try to feed my son with syringe or spoon before operation, because he could not accept, he cried and moved his head around, so after operation it was very hard time for us to feed him by spoon/syringe, he cried all the time. It is not good for us with this feeding method".

"She usually gets milk 3 ounce/time, but with syringe she just gets 2 ounce/time so I have to feed her more often".

"This is complicated for us to feed our child with syringe, we used to try to feed him before come for operation, but he refused so we gave up. I felt he is not happy with this and he needs to suck milk by himself".

Discussion

The present study shows no statistical significant difference between breast/bottle and spoon/syringe groups for wound dehiscence. Comparing different types of clefts, and different surgeons, it shows similar results with 4 articles related to feeding in patients with cleft lip repair as follows: Cohen M et al (1992)⁽⁹⁾ Determine feeding protocol, tube/syringe and bottle/breast feeding. It is a retrospective study with 80 patients, 2 feeding protocols, comparing tube/syringe feeding with bottle/breast feeding. They found no wound complications. Darzi et al (1996)⁽¹⁰⁾ evaluation on the effects of feeding on surgical repair, prospective, randomized was studied with 40 children, 20 for breast and 20 for spoon feeding. They found that breast feeding is safe; for spoon-feeding group infants required analgesia and intravenous fluid more than breast feeding. Skinner J et al (1997)⁽⁸⁾ to identify post-op complication between non-nipple and nipple feeding. It is a retrospective study with 42 patients.

They found no complications related to feeding strategies. Assuncao et al (2005)⁽⁵⁾ to evaluate the nutritional status and behavior of the surgical wound following cheiloplasty and reaction of children. It is an experimental study with 45 patients, aged 3 to 13 months old; 22 patients were provided bottle feeding, 23 patients were provided spoon feeding after lip repair. They found no significant difference between the groups in wound behavior. Spoon and bottle feeding had the same influence on the surgical wound. For the reaction in spoon/syringe feeding group, patients were more restless than breast/bottle feeding group because they were not used to that technique and get milk more slowly than sucking by themselves because sucking is a very important issue as it is not only a source of food but it is comforting for infants⁽²⁰⁾. The feeding process provides bonding between mother and child as well as oral motor skill development⁽¹⁷⁾. This is the same as the study found with patients in the spoon-feeding group which presented remarkable discomfort and irritability⁽⁵⁾.

Conclusion

Breast/bottle feeding and syringe/spoon feeding have the same result on the surgical wound; breast/bottle feeding is not the cause of wound dehiscence. Parents were more satisfied to feed children by breast/bottle, and more relaxed. The authors suggest feeding patients after cheiloplasty by breast/bottle feeding because that's what they used to do before the operation; or they can choose a type of feeding that they prefer.

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Potential conflicts of interest

None.

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เปรียบเทียบการแยกของแผลและความพึงพอใจของผู้ปกครองผู้ป่วยปากแหว่งเพดานโหว่ที่ผ่าตัดตกแต่งริมฝีปากระหว่างการให้นมโดยการป้อนด้วยช้อน/กระบอกฉีดยากับการดูดนมมารดา/ดูดนมจากขวด

ดาราวรรณ อักษรวรรณ, พลากร สุรกุลประภา, พันธมนัส ปัตตังทานัง, สุมาลี พงศ์ผกาทิพย์, กมลวรรณ เจนวิถีสุข, บวรศิลป์ เชาวนชื่น

ภูมิหลัง: ปากแหว่งเพดานโหว่เป็นความพิการแต่กำเนิดที่พบมากที่สุด chez ผู้ป่วยที่มีความพิการของศีรษะและใบหน้าแต่กำเนิด ในภาคตะวันออกเฉียงเหนือพบอัตราการเกิด 2.49:1,000 โรงพยาบาลศรีนครินทร์ มีผู้ป่วยเข้ารับการรักษา 150-200 รายต่อปี ผู้ป่วยปากแหว่งเพดานโหว่ต้องการการผ่าตัดเร็วที่สุดเท่าที่จะสามารถทำได้หลังผ่าตัด จะไม่ทำให้ผู้ป่วยดูดนมมารดาหรือดูดนมจากขวดเพื่อหลีกเลี่ยงการตีบริเวณแผลระหว่างการดูดนม ซึ่งอาจเป็นสาเหตุของการแยกของแผลได้ ดังนั้นเป็นเรื่องที่ค่อนข้างยุ่งยากสำหรับบิดา มารดา ผู้ป่วยจะหันหน้าหนี ร้องไห้ขณะป้อนนม เพราะหิวและไม่พอใจ จากการศึกษาที่ผ่านมาพบว่าการดูดไม่ใช่สาเหตุของแผลแยกในผู้ป่วย หลังผ่าตัดตกแต่งริมฝีปากแต่การศึกษาไม่ได้มีรายละเอียดของชนิดของปากแหว่ง

วัตถุประสงค์: เพื่อเปรียบเทียบการแยกของแผลระหว่างการให้นมโดยการป้อนด้วยช้อน/กระบอกฉีดยากับการดูดนมมารดา/ดูดนมจากขวด

วัสดุและวิธีการ: เป็นการศึกษาแบบทดลองประชากรที่ศึกษาเป็นผู้ป่วยหลังผ่าตัดปากแหว่งที่เข้ารับการรักษาโดยการผ่าตัดที่หอผู้ป่วย 3 ค โรงพยาบาลศรีนครินทร์ คณะแพทยศาสตร์ มหาวิทยาลัยขอนแก่น ระหว่าง เดือน พฤษภาคม พ.ศ. 2553 ถึง กุมภาพันธ์ พ.ศ. 2556 จำนวน 192 ราย เป็นกลุ่มป้อนด้วยช้อน/กระบอกฉีดยาและกลุ่มดูดนมมารดา/ดูดนมจากขวด กลุ่มละ 96 ราย วิเคราะห์ข้อมูลอัตราการแยกของแผลโดยใช้ Z-test

ผลการศึกษา: พบว่าไม่มีความแตกต่างกันในเรื่องการแยกของแผลผ่าตัดระหว่างการให้นมโดยการป้อนด้วยช้อน/กระบอกฉีดยากับการดูดนมมารดา/ดูดนมจากขวด (p -value = 0.320, 95% confidence interval -0.031-0.010) บิดา มารดากลุ่มดูดนมมารดา/ดูดนมจากขวดมีความพึงพอใจในมากกว่ากลุ่มป้อนนมด้วยช้อน/กระบอกฉีดยา ผู้ป่วยกลุ่มดูดนมมารดา/ดูดนมจากขวดมีความผ่อนคลายมากกว่า

สรุป: การให้นมโดยการดูดนมมารดา/ดูดนมจากขวดมีผลต่อแผลผ่าตัดเหมือนกัน การให้นมโดยให้ดูดนมมารดา/ดูดนมจากขวดไม่ใช่สาเหตุของการแยกของแผล
