

tion. Communication through the Pores of Kohn leading to partial aeration of the sequestration was responsible for the partial aeration seen after bronchoscopy. Srikanth, *et al.*(2) reviewed 57 cases and reported that bilateral communicating sequestrations occurred only in 7% of cases.

Treatment consists of lobectomy with division of fistulous communication. Embolisation has been tried with varying results. In our case bilateral lower lobectomies and middle lobectomy would not have been compatible with life. Spontaneous occlusion of the vascular supply has been reported with no untoward effect(3), which prompted us to ligate the blood supply to the left side along with ligation of the gastro-bronchial communication. This combined



Fig. 1. Gastrograffin study showing gastro bronchial fistula.

Analgesic Effects of Breastfeeding on Heel Lancing

Pain is routinely experienced in hospital settings by healthy term newborns having a long lasting effect in form of exaggerated reactivity(1). Clinical interest was generated

when it was observed that natural interventions like skin-to-skin contact and breastfeeding are effective at a time when many pharmacological interventions are not(1-3). The objective of this study was to assess the efficacy of such a natural intervention *i.e.*, breastfeeding as an analgesic.

Acknowledgement

We thank Dr. P.K. Rajiv and his team for pre and post-operative medical management in the Department of Neonatology; and Dr. Lakshmi and Dr. Rekha for per-operative anesthetic support.

Joy M.G.,

Mohan K. Abraham,

Department of Pediatric Surgery,

Amrita Institute of Medical Sciences,

Amrita Lake,

Elamakkara,

Kochi 682 026, Kerala, India.

E-mail:mohanabraham@aimshospital.org

REFERENCES

1. Savic B, Birtel FJ, Tholen W, Funke HD, Knoche R. Lung sequestration: Report of seven cases and review of 540 published cases. *Thorax* 1979; 34: 96-101.
2. Srikanth MS, Ford EG, Stanley P, Mahour GH. Communicating bronchopulmonary foregut malformation: Classification and embryogenesis. *J Pediatr Surg* 1992; 27: 732-736.
3. Lababidi Z, Dyke PC, Angiographic demonstration of spontaneous occlusion of systemic arterial supply in pulmonary sequestration. *Pediatr Cardiol* 2003; 24: 406-408.

This was a prospective randomized case

control study carried out from July 2003 to October 2003, in neonatal care unit of a major teaching institution with maternity services. Exclusively breastfed term neonates more than 48 hours old, more than 2500 grams, with no high-risk neonatal factors undergoing heel lancing were selected for study after well-informed and valid parental consent. Neonates who were heel lanced while being breastfed formed the study group whereas those newborns that were heel lanced after being swaddled and kept on a cradle away from their mothers acted as controls.

Both groups were assessed prior to and 1, 5, and 15 minutes after heel lance for behavioral (state of arousal, cry, facial expression, body movements) and physiological (breathing pattern, heart rate) parameters and an individual composite score was calculated. Scores of both groups were analyzed with the help of computer statistical package ANOVA. Lower score was considered to be showing better analgesia.

One hundred cases were enrolled, of which fifty cases formed the study group (breastfeeding group) and fifty formed control group. Despite comparable pain scores observed at baseline before heel lancing, statistically significant lower scores were observed at 1, 5, and 15 minutes of lancing in breastfed group than non-breastfed group

(Table I). Pain scores in study group were also found to decline much earlier to a lower value than the control group.

Many recent studies have shown analgesic effects of breastfeeding during acute, short lasting, repetitive painful procedures in term newborns(2,4,5). The act of breastfeeding in form of multimodal sensory stimulation potentiates analgesic effects of breast milk. Thus, it can be utilized for pain relief during minor procedures in newborns.

**Niranjan Shendurnikar,
Kinal Gandhi,**
*Department of Pediatrics,
Medical College, Baroda,
Gujarat 390 001, India.*

Correspondence to:
Dr. Niranjan Shendurnikar,
*C-21, Nandigram-2,
Sindhvai Mata Road,
Baroda 390 004, India.
E-mail: drniranjan@icenet.net*

REFERENCES

1. Anand KJS. Clinical importance of pain and stress in preterm newborn infants, *Biol Neonate* 1998; 73: 1-9.
2. Bilgen H, Ozek E, Cebeci D, Ors R. Comparison of sucrose, expressed breastmilk and breastfeeding on the neonatal responses to heel prick. *J Pain* 2001; 2: 301-305.

TABLE I—Analysis of Pain Scores Among Breastfed and Non Breastfed Groups

	Study group Mean (SD) (n = 50)	Control group Mean (SD) (n = 50)	P-value
Baseline	1.64 (0.56)	1.68(0.47)	>0.05**
1 min	7.60(1.80)	8.9 (0.91)	<0.001*
5 min	5.38(1.77)	8.28(1.31)	<0.001*
15 min	2.02(0.89)	4.66(1.75)	<0.001*

* Significant; ** Not significant.

3. Blass EM, Barr RG. Evolutionary biology and the practice of medicine; the case of management of infant pain experience. *J Dev Behav Pediatr* 2000; 21: 283-284.
4. Craig KD, Korol CT, Pillai RR, Challenge of judging pain in vulnerable infants. *Clin Perinatol* 2002; 29: 445-457.
5. Gray L, Miller L W, Philipp BL, Blass EM. Breastfeeding is analgesic in healthy newborn. *Pediatrics* 2002; 109: 590-593.

Tobacco use Among School Students in India: The Need for Behavioral Change

Very few studies were reported on tobacco use in Indian school students in the past. Recently the global youth tobacco survey (GYTS) collaborative group(1) initiated a worldwide survey of students of the 13-15 years age in 150 countries including India. The objective of this letter is to highlight the lack of awareness of the harmful effects of tobacco use observed from first report(2) of GYTS in school children of Northeastern states of India. The State wise frequency of current tobacco use in any form and in cigarette form in some selected states of India reported by GYTS Collaborative Group(1) is shown in *Fig. 1*. It is evident from the figure that the frequency of tobacco use among school students is alarmingly high in North-eastern states of India and Bihar.

The current tobacco use (both smoke and smokeless) in any form in these Northeastern states(2) among boys was ranging from 50.4% to 74.4% while the use among girls ranged from 32.0% to 56.4%. The frequency of smoking among boys was from 28.6% to 40.8% and that of girls was from 8.9% and 28.2%. The use of cigarette among boys was from 13.1% to 32.8% and among the girls was

from 2.5% to 13.4% in different states. The frequency of smokeless tobacco use among boys was from 35.0% to 52.5% and the girls 26.8% to 47.2%. These findings indicate high frequency of tobacco use even among girl students in the Northeast part of India. On the hand a Recent report of GYTS from Tamil Nadu(3) documented a low (7.1%) frequency of current tobacco use among school students.

It appears that the school students from North-eastern states(2) know very little about the ill effect of tobacco use and schools did not include much to its curriculum to educate the students on ill effects of tobacco use. Studies that determined the magnitude of tobacco use stressed the need for school health education programs to control this epidemic. To our knowledge, there is only one unique Indian study(4) of school-based intervention to reduce tobacco use among 12-year-old

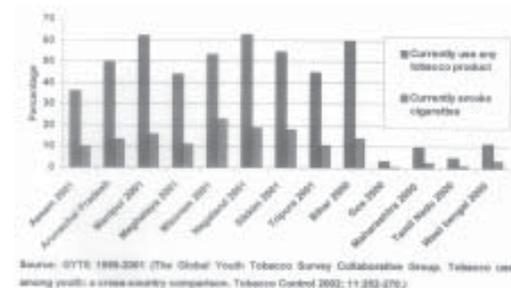


Fig. 1. Percentage frequency of tobacco use among school students in some selected states of India.