

Branding in Children- A Cross Sectional Study at a Tertiary Care Rural Hospital

Harsha P.J.¹, Phani Shankar Reddy Aparacharla², Hemanth Mogili³, Prasen Reddy Tamatam⁴,
Raghurami Reddy O.⁵

¹Associate Professor, Department of Paediatrics, PES Institute of Medical Sciences and Research, Kuppam, Andhra Pradesh. ²Postgraduate Student, Department of Paediatrics, PES Institute of Medical Sciences and Research, Kuppam, Andhra Pradesh. ³Postgraduate Student, Department of Paediatrics, PES Institute of Medical Sciences and Research, Kuppam, Andhra Pradesh. ⁴Postgraduate Student, Department of Paediatrics, PES Institute of Medical Sciences and Research, Kuppam, Andhra Pradesh. ⁵Postgraduate Student, Department of Paediatrics, PES Institute of Medical Sciences and Research, Kuppam, Andhra Pradesh.

ABSTRACT

BACKGROUND

Inflicting burns on skin of children or branding is a harmful practice still prevalent in India. This study was done to evaluate the branding practices, both old and new/fresh, in children attending a rural tertiary care hospital.

METHODS

This is a cross sectional study conducted among children attending Outpatient Department (OPD) and in-patients (IP) of PES Hospital, Kuppam from April 2015 to September 2015.

RESULTS

A total of 96 children [both out-patients (OPD) and in-patients (IP)] with old and new branding were included in the study. Male babies with branding were 64.58%, old branding marks were seen in 85.54% and fresh branding marks in 11.46%. Four circular branding marks on abdomen (one around umbilicus, one each in epigastric region, right and left lateral side of umbilicus in lumbar regions) was the most common variety observed. New/Fresh branding was done most commonly for children with seizures.

CONCLUSIONS

Branding is most commonly done in infancy which can be dangerous. Fresh branding is most commonly done for seizures.

KEYWORDS

Branding, Children, Harmful Practices, Inflicting burns, Traditional Beliefs

Corresponding Author:

Dr. Harsha P. J.,
Associate Professor,
Department of Paediatrics,
PES Institute of Medical Sciences and
Research,
Kuppam- 517425, Andhra Pradesh.
E-mail: harshabattery@gmail.com
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BACKGROUND

The harmful practice of “branding or inflicting burns” over the body as a remedy for various illnesses is still prevalent in India.¹⁻³ Branding is a traditional practice where third degree ‘therapeutic’ burns are inflicted on the skin with a hot iron rod or metallic object to treat various conditions. These are ancient methods which are crude and inhumane. The traditional treatment given as branding is more unbearable than the original complaint. They even carry the risk of complications such as acute infection, transmission of blood-borne pathogens, allergic reactions, and complications arising from third-degree burns.^{4,5} Branding is a criminal offence under Indian Penal Code-324 and there is an urgent need to abolish this practice. There is requirement of extensive education programs explaining its harmful effects aimed at rural illiterate masses including people involved in carrying out branding.⁶

METHODS

This is a cross sectional study conducted among children attending Outpatient Department (OPD) and in-patients (IP) of PES Hospital, Kuppam from April 2015 to September 2015. Children with branding (old and new/fresh) from both outpatient department and admitted patients below 18 years of age were included in the study. Patients whose parents or guardians not willing to participate in the study were excluded from the study. A total of 96 children with old and new cases of branding (inflicting burns to skin) were included in the study. Ethical committee approval was taken before the start of the study. Consent was taken before collecting the data. All children attending OPD or admitted was asked for history of branding and consent was taken before including in the study. The socio-demographic data such as sex, age of the child, religion, and socioeconomic status was taken. The pattern of branding, old or new branding, the reason for branding, who initiated for branding and was it useful was asked. The details were noted. All parents were educated regarding complications of branding and importance of preventing it in future among all age groups. Data was analysed in percentage.

RESULTS

Most children with branding were seen in age group of 0-3 months (63.54%, 61/96) followed by 3-6 months (17.71%, 17/96), 6-9 months (5.21%, 5/96), 9-12 months (3.13%, 3/96), 1-2 years (3.13%, 3/96) and 3-9 years (7.29%, 7/96) in decreasing order of frequency.

Most common pattern of branding observed was four circular branding marks on abdomen (one around umbilicus, one each in epigastric region, right and left lateral side of umbilicus in lumbar regions- Figure 1a).

Parameters	Old Branding	New/Fresh Branding	Total
Children with branding	85 (88.54%)	11 (11.46%)	96 (100%)
Male	56 (58.33%)	6 (6.25%)	62 (64.58%)
Female	29 (30.21%)	5 (5.21%)	34 (35.42%)
Religion			
Hindu	73 (76.04%)	10 (10.42%)	83 (86.46%)
Christian	1 (1.04%)	0 (0%)	1 (1.04%)
Muslim	11 (11.45%)	1 (1.04%)	12 (12.5%)
Socioeconomic Status			
Lower (V)	44 (45.83%)	7 (7.29%)	51 (53.13%)
Upper Lower (IV)	36 (37.5%)	4 (4.17%)	40 (41.67%)
Lower Middle (III)	4 (4.17%)	0 (0%)	4 (4.17%)
Upper Middle (II)	1 (1.04%)	0 (0%)	1 (1.04%)
Upper (I)	0 (0%)	0 (0%)	0 (0%)

Table 1. Basic Parameters and Demographic Details



Figure 1. Pattern on Skin Observed in Children with Old Branding

Old Branding (Total 85 /96, 88.54%)		New Branding (Total 11/96, 11.46%)	
Pattern of Branding	% (No.)	Pattern of Branding	% (No.)
1. Four circular branding marks on abdomen (One each- around umbilicus, epigastric region and both lumbar regions) (Figure 1a)	89.41% (76/85)	1. Four circular branding marks on abdomen (One each- around umbilicus, epigastric region and both lumbar regions) (Figure 2a)	27.27% (3/11)
2. Single Square or rectangular mark around umbilicus (Figure 1b)	4.71% (4/85)	2. Burn mark circular 0.5 cm on back (single or two) (Figure 2b)	27.27% (3/11)
3. Circular mark on lateral aspect of arm	2.35% (2/85)	3. Circular mark- 1cm on nape of neck (Figure 2c)	18.18% (2/11)
4. Circular mark on dorsum of lower forearm (Fig 1d)	1.78% (1/85)	4. Small circular mark on medial side of eye brow and multiple marks on left thumb (Figure 2e)	9.09% (1/11)
5. Rectangular mark around umbilicus, X mark in both hypochondriac region and double horizontal marks in epigastric and hypogastric regions (Figure 1c)	1.78% (1/85)	5. Single Vertical 1 cm mark on medial side of eye brow (Figure 2d)	9.09% (1/11)
6. Horizontal mark above umbilicus	1.78% (1/85)	6. Two horizontal marks in hypogastric region (Figure 2f)	9.09% (1/11)

Table 2. Pattern of Old and New/Fresh Branding in Children



Figure 2. Pattern on Skin Observed in Children with New/Fresh Branding

Reason for Branding		Initiation of Branding (Influenced by)	
1. Well Being of child	64.58% (62/96)	1. Elders in family	87.5% (84/96)
2. Pain abdomen/Colic in infants	11.46% (11/96)	2. Parents	7.29% (7/96)
3. Seizures	9.34% (9/96)	3. Others	5.21% (5/96)
4. Cough/Asthma	7.29% (7/96)	Branding Done by	
5. Excessive cry	5.21% (5/96)	1. Specified person based on local belief	83.33% (80/96)
6. Developmental Delay	1.04% (1/96)	2. Elders in family	8.33% (8/96)
7. Weakness	1.04% (1/96)	3. Others	7.29% (7/96)
Age of Branding			
Birth to 3 months – 61/96 (63.54%)		9-12 months – 3/96 (3.13%)	
3-6 months – 17/96 (17.71%)		1-2 years – 3/96 (3.13%)	
6-9 months – 5/95 (5.21%)		3-9 years – 7/96 (7.29%)	
Table 3. Reasons for Branding, Who Initiated Branding and Person Doing Branding			

The most common reason for branding was for well-being of child followed by pain abdomen/colic in infants and seizures (Table 3). Influence for branding was most commonly from elders in family (Table 3). Branding was usually done by specified person in locality (Table 3). A total of 11 children had new/fresh branding. One neonate with branding had sepsis requiring NICU (Neonatal Intensive Care Unit Admission) (Figure 2f), 7 had seizures (Figure 2b, c, d, e), one was admitted for pneumonia (Fig 2a) and 2 took treatment on OPD basis (Figure 2a). Only 6.25% (6/96) felt that branding was helpful. Only parents of 5 children with old branding marks (5.88%, 5/85) received health education by doctor regarding complications of branding and its prevention in future.

DISCUSSION

The National Human Rights Commission (NHRC) has issued notice to the Gujarat government on alleged branding of children with hot metals in Kutch and Rajkot districts following media reports. The chief secretary was asked to inform where such inhuman custom is prevalent in the State and the remedial steps taken by the administration to stop it.⁷ Branding is a type of child abuse and should be condemned by the society. Every measure should be taken to educate the rural families against this inhumane, medieval custom.⁸

There is no record of how the practice of branding originated. It is believed to be centuries old. In ancient times traditional healers used hot rods to burst septic boils or pressed them onto open wounds to cauterize the infection. But gradually, the practice attained a sort of religious sanctity and began to be associated with local deities. It was advanced as a cure for common diseases like malaria, jaundice, meningitis and convulsions.⁵ In our study circular branding marks were done either using heated glass or circular iron rods. The other small marks were made using heated metal rods.

This practice is still very much seen in villages even today, various body parts are branded for different diseases-the abdomen for malaria and jaundice, the neck or the forehead for meningitis and the wrist for convulsions. The red hot rod is just one of the instruments used, others include burning ropes and metal rings.⁵

Branding marks were more common in male children, Hindu community and lower socioeconomic status in our study. The practice is still seen in villages or poor illiterate families.^{3,5,8}

Most common pattern of branding observed was four circular branding marks on abdomen (Figure 1a). This pattern was seen usually in children with previous branding, done usually in infancy in our study. New or fresh branding was done most common for seizures and had 1-2 mm burn marks on face or hands or back in our study. Branding marks were most seen on the abdomen. The branding was most common in healthy neonates which were similar to our study (Table 3). These healthy neonates are unnecessarily exposed to hazards of branding.¹ In adults most common reason for branding was chronic medical conditions such as chronic liver disease, chronic malaria, acute glaucoma and metastatic melanoma.⁴

The reason for branding was well being of the child (64.58%) followed by pain abdomen/colic (11.46%), seizures (9.34%), cough/asthma (7.29%), excessive cry (5.29%), developmental delay and weakness (1.04%) in decreasing order of frequency. Branding on abdomen in neonates prevents all types of abdominal problems for rest of the life.² The branding is done for minor childhood problems like abdominal pain, pneumonia or cough, seizures, hydrocele, jaundice, convulsions general ill health, failure to thrive recurrent headaches, chronic pain etc.^{2,3,6,9,10} Circular mark on dorsum of lower forearm (Figure 1d) in this study was done in view of chronic joint pain later diagnosed as rheumatoid arthritis. Jaundice was amongst the commonest complaints for which patients opted for traditional / alternative forms of treatment.⁵ It is strongly believed that branding cures jaundice. When the underlying disease does not resolve spontaneously, patients present to the hospital. Branding was done for variety of benign and malignant causes of jaundice.⁵

Branding was usually initiate by elders in family (87.5%) and done usually by traditional healer (83.33%) in our study (Table 3). The family members usually believe that the offending agent comes out of the brand site ridding the body of the disease.^{8,10} Branding is usually done by traditional healer.^{3,6}

Only 6.25% parents felt that branding was helpful. Health education by doctor was addressed to only 5.88% of parents with branding regarding its complications and prevention earlier to contact with us. It is important for the health care professional to address the harmful effects of branding to prevent it. In a study done in Chennai, 9.3% of burns were due to child abuse and branding is one of them.¹¹ Keeping a registry of children with branding will help to have insights about the reasons and preventive actions to be taken.² Stringent laws should be there to prevent branding.^{2,5} Branding is punishable as per Indian Penal Code 324.² Public awareness through media, political commitment, better health facilities available to poor community at door step and education by health care personnel can help to prevent branding.^{2,3,6,9,10}

In a study among neonates, branding was noted over abdomen in 219/2764 (7.9%) neonates. Around 11 of these neonates developed septicemia and 3 died. In another study, 371 neonates with branding were seen over a 10-year period (1982-1991). Eighteen neonates developed septicemia and 3 died.^{1,2,6} There are reports of evisceration of abdomen needing exploratory laparotomy in neonates with branding by sharp objects for febrile illness. It was done with the belief that branding will remove the bad blood.¹²

There are reports of squamous cell carcinoma developing at the sites of branding in cattle and sheep. This needs to be evaluated in children on a long term follow up. The belief in this method of treatment leads to delay in seeking qualified medical help. People in many parts of India prefer consulting traditional practitioners for initial treatment. In a study from rural India, help from traditional practitioners was sought in more than 70% of children with epilepsy. This practice is related to lower costs and more trust in that form of treatment.⁶ Despite health awareness, strong cultural beliefs force people to undergo branding as a treatment in India even now. Hot iron branding is still very common in some villages of Madhya Pradesh for a few common diseases such as ascites, headache, pneumonia, common cold, or hernia.⁹ Explaining the complications of branding and delay in treatment is important. Better primary care available in surroundings especially in rural and outreach areas is important.

CONCLUSIONS

In children, old branding marks were seen most commonly on abdomen in the form of 4 circular marks. It was done usually in infancy, done by traditional healer under the influence of elders in the family. The new branding marks were seen at later age most commonly done for seizures. Roughly about 6% received education regarding harmful effects of branding and its prevention by health care personnel before contact with us. This needs to be improved.

REFERENCES

- [1] Mohapatra SS. Branding--a prevalent harmful practice in neonatal care. *Indian Pediatr* 1991;28(6):683-684.
- [2] Mehta MH, Anand JS, Mehta L, et al. Neonatal branding--towards branding eradication. *Indian Pediatr* 1992;29(6):788-789.
- [3] Adhisivam B, Gowtham R. Branding treatment of children in rural India should be banned. *BMJ* 2005;330(7489):481.
- [4] Raza S, Mahmood K, Hakeem, et al. Adverse clinical sequelae after skin branding: a case series. *J Med Case Rep* 2009;3:25.
- [5] John SI, Balekuduru A, Zachariah U, et al. Branding to treat jaundice in India. *Trop Gastroenterol* 2009;30(4):241-242.
- [6] Kumar S, Rashmi S. Branding: a harmful practice. *Indian Pediatr* 2005;42(7):721.
- [7] NHRC notice to Gujarat on branding of children. *The Hindu* (Internet). 2011 Dec 24 (cited 2019 Dec 23). <https://www.thehindu.com/news/national/nhrc-notice-to-gujarat-on-branding-of-children/article2742477.ece>
- [8] Chaitanya PVV, Shrikiran H, Suneel M, et al. Skin branding in Indian children: a still prevailing superstition in the modern era. *Webmed Central PAEDIATRICS* 2012;3(1):WMC002828.
- [9] Mahant S, Reddy CM, Mahant S, et al. Hot iron rods branding, its complications: still continue in central India. *CHRISMED J Health Res* 2017;4(4):264-267.
- [10] Taneja DK, Singhal PK, Dhawan S. Superstitions in pediatric illnesses among rural mothers. *Indian Pediatr* 1988;25(5):447-452.
- [11] Ramakrishnan KM, Mathivanan T, Sankar J. Profile of children abused by burning. *Ann Burns Fire Disasters* 2010;23(1):8-12.
- [12] Emordi VC, Aisien E, Osagie OT, et al. Evisceration following abdominal scarification in neonates. *J Trop Pediatr* 2018;64(3):237-240.