



Acquired body marks: A mode of identification in Forensics



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ABSTRACT

Each individual regardless of sex, age and caste has a particular identification mark present on their body. This study is mainly an attempt to understand the distribution pattern of different types of acquired body marks present on the body which can be used as a marker for individual identification in Forensics.

Data was collected by means of observation, interview schedule and interviews from 160 individuals of 6 multi-caste villages of Udaipur in Rajasthan, India. A wide variation was observed in the distribution patterns of various acquired body marks. Scars were the most prevalent (87.5%) followed by body piercing (66%), occupational marks (38.5%), tattoo marks (27.5%) and body deformity (5%).

There is a strong association between sex of an individual and presence of tattoo and occupational marks. Type of occupation is associated with the presence of scar and occupational marks. Age also has its influence on the presence and type of - tattoo and occupational marks. This wide variation in the distribution of acquired body marks based on sex, age, educational status, occupation, religion etc. of an individual need to be considered and included as a method of identification of unknown in Forensic Science.

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1. Introduction

In Forensics, determination of individuality of a person is referred as identification. For a forensic expert, identification of the living/dead body or skeletonised remains is the foremost important thing for solving any case. The identity of any individual can be established by determining their sex, age, stature, religion, ethnicity, fingerprint, lip print, somatometric measurements, personal appearance, footprints, serological markers, hand writing and gait characteristics. In addition to these, there are two more characters which can help a lot in identification in Forensics—congenital and acquired body marks. Congenital marks are those present since the time of birth like birthmark, moles, congenital deformities etc. On the other hand, acquired are those which appeared on the body later on in one's life after birth. Such body marks include tattoo marks, occupational marks, scars, body deformity, body piercing etc.

According to Modi⁴ (1977), “a scar is a product of healing of a wound by fibrosis and cicatrisation. All scars, in the true sense of their histological and morphological are permanent which may change in their size during the growing ages but their shapes remain unchanged all throughout the life. These permanent patterns of scars on the skin, on the body through wound (by cut, accident or surgery) can be used to identify a person. The shape, size, age, and type of a scar reveal lot information about the type, time and weapon used in injury”. Also, according to Parikh⁵ (2007), “occupational marks are characteristics which result from adaptation to work. It indicates the identity and social position of the living or the dead”. But not only these two, tattoo marks which are produced by imprinting pigments of different colours in the skin, by multiple puncture method^{1,3}; body piercing especially in cases of males; and accidental deformity in the form of loss of a body part, paralysis, loss of vision also forms an important aspect of identification in Forensic Science.

A similar study has been conducted by Choudhary et al.² on identification marks among the Muslim, Machhi and Patels of Daman and Diu, western India. But still, there has not been much work done on acquired body marks in the field of Forensic

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Table 1

Showing frequency distribution of presence of scars on the basis of sex of an individual, occupation, family size and socio-economic status.

Variables		Presence of scar				Total N
		Present		Absent		
		N	%	N	%	
Overall		140	87.50	20	12.50	160
Sex	Male	71	88.75	9	11.25	80
	Female	69	86.25	11	13.75	80
Occupation	Unemployed	2	1.42	–	–	2
	Student	21	15.00	–	–	21
	Farmer	9	6.42	4	20.00	13
	Govt. Service	3	2.14	–	–	3
	Private service	3	2.14	1	5.00	4
	Self employed	19	13.57	1	5.00	20
	Retired	3	2.14	–	–	3
	Home maker	42	30.00	8	40.00	50
	Fabrication work	15	10.71	4	20.00	19
	Stone and construction work	12	8.57	1	5.00	13
	Tailoring	7	5.00	–	–	7
	Barbering	2	1.42	1	5.00	3
	Thread mill work	1	0.71	–	–	1
	Milking	1	0.71	–	–	1
Family size	0–4	48	30.00	4	–	52
	5–9	80	50.00	13	65.00	93
	10–14	12	7.50	2	10.00	14
	15–20	–	–	1	3.25	1
Socio-economic status	Low	80	50.00	13	65.00	93
	Medium	60	37.50	7	35.00	67

Table 2

Showing frequency distribution of types of injury marks on the basis of sex and age group (in years) of an individual.

Type of Injury Marks	Overall		Independent variables											
			Sex				Age group (Years)							
			Male		Female		Below 18		18–45		45–60		Above 60	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Surgical Marks	24	17.14	12	50.00	12	50.00	–	–	14	58.33	8	33.33	2	8.33
Accident Marks	111	79.28	62	55.85	49	44.14	11	9.90	67	60.36	26	23.42	7	6.30
Assault Marks	1	0.71	1	100	–	–	–	–	1	100	–	–	–	–
Needle marks	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Skin problem	17	12.14	10	58.82	7	41.17	–	–	12	70.58	4	23.52	1	5.88
Removal of tattoo marks	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Vaccination marks	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Burn Marks	16	11.42	7	43.75	9	56.25	2	12.50	8	50.00	3	18.75	3	18.75

Table 3

Showing frequency distribution of types of injury marks on the basis of type of occupation.

Type of injury marks	Surgical marks	Accidental marks	Assault marks	Skin problems	Burn marks
Unemployed	–	2	–	–	–
Student	3	16	–	–	3
Farmer	2	5	–	–	1
Government job	2	1	–	1	1
Private sector	1	3	1	1	–
Self employed	3	17	–	1	2
Retired	–	3	–	5	1
Home maker	6	32	–	1	4
Fabrication worker	3	13	–	1	3
Stone and construction work	2	11	–	1	–
Tailoring	–	7	–	–	–
Barbering	2	–	–	1	–
Thread mill work	–	1	–	5	–
Milking	–	–	–	–	1

Science. Therefore, this multi-caste study is an attempt to understand the distribution pattern of various types of acquired body marks and also a step towards this area of Forensics. It also makes an attempt to understand how various acquired body

marks vary mainly according to sex, age, caste, occupation of an individual and family size. In Indian context, caste is an endogenous population group which is also based on occupation of the population group.⁶

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