

RESEARCH ARTICLE

Experimental Birthmarks: New Cases of an Asian Practice

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Abstract—Experimental birthmarks involve a practice in several countries in Asia in which the body of a dying or recently deceased person is marked with a substance, most often soot, in the belief that when the individual is reborn, the baby will bear a birthmark corresponding to the mark. This is usually done with the expectation that the rebirth will occur in the same family as the deceased individual. A field study was undertaken in Thailand and Myanmar (Burma) to examine such cases. Eighteen cases were found in which a baby was born with a birthmark that corresponded to a marking made on the body of a deceased person; in six of these, the child also made statements that the family believed were related to the life of the deceased individual. Possible etiologies for these cases are explored.

Keywords: Birthmarks—experimental birthmarks—reincarnation

In cultures with a prevalent belief in reincarnation, people often interpret birthmarks and birth defects as evidence of a connection between a child and a deceased individual. In some Asian countries, the body of a dying or deceased person is sometimes marked in the belief that when the person is reborn, the baby will bear a birthmark that corresponds to the mark made on the body. The person marking the body often says a prayer that the dying person take the mark with him or her to the reborn body. Stevenson (1997) coined the term “experimental birthmarks” to describe this practice, and he reported that it occurred widely in Asia, with cases being found most readily in Thailand and Myanmar (Burma). Although Stevenson was the first person to assemble and report a group of these cases, several anthropologists and other writers about Asian cultures had earlier drawn

attention to them, sometimes mentioning individual cases (see Stevenson 1997:804 for sources).

Stevenson (1997) documented 20 such cases in Thailand and Myanmar from fieldwork that was primarily conducted at least 20 years before, and he reported that he and his associates had also studied 15 others. In all of them, the subject was born with a mark that informants said corresponded in location to the mark made on the deceased person.

Since the cases were generally 20 years old or older, we wished to learn whether more recent cases could be found and investigated. Though the practice appears to be disappearing in some areas of Thailand, we found 13 experimental birthmark cases in the northeastern region of Thailand and 5 more in Myanmar. While the custom of marking bodies may be more common in this area of Thailand than in some others, the villagers there report that it is only rarely done; they estimate that perhaps 1% to 4% of bodies are marked.

Methods

Cases were identified in various ways. Our interpreters had found some when they made inquiries prior to our visits. As these were word-of-mouth inquiries made to acquaintances, they only surveyed a limited number of people. Often, as we investigated one case, villagers would mention another case, which we would then investigate later.

Once a name was given to us, we endeavored to interview as many informants as possible. Most of the cases were in small villages, and we could find the families in question by simply going to the villages and asking for them. We then examined the children and sketched and photographed their birthmarks. We interviewed their families to verify that the marks were, in fact, present at birth. We also interviewed the individuals who had marked the deceased persons' bodies, and we had them show us how they had made the marks. In addition, we interviewed other witnesses to the markings whenever possible.

Results

We investigated 18 cases in which a child bore a birthmark that appeared to correspond to a mark made previously on a dying or deceased individual (Table 1). In 15 of these, the deceased individual was in the same family as the child. One of them involved a deceased sibling, while the others primarily involved grandparents. In 12 of the 18 cases, the deceased individual was at least 59 years old at the time of death. As for the cause of death, only one was violent, that being a gunshot wound. This is in contrast

TABLE 1
Characteristics of Subjects

Subject	Age at Interview	Deceased's Relation to S	Deceased's Age at Death	Mode of Death	Mark Seen by Mother	Spoke of Previous Life
1	7	Paternal grandfather	63	"Swollen brain"	No (may have heard)	No
2	9 (mark no longer seen)	Maternal grandmother	60s	Heart attack	Yes	No
3	5 months	Paternal grandfather	85	After surgery	No (but was told)	No
4	15	Maternal great-grandmother	83	Unrecorded	Yes	No
5	23	Maternal aunt	3	"Collapsed and died"	No (knew of it but not site)	No
6	4	Paternal grandmother	Elderly	Diarrhea	No (knew of it but not site)	No
7	20 months	Great-grandfather	Elderly	Unrecorded	No (may have heard)	No
8	3	Paternal great-aunt	Elderly	Unrecorded	No	No
9	17	Distant relative	21	Gunshot wound	No	No
10	18	Unrelated	Adult	Infection from wound	No (may have heard)	Yes
11	14	Brother	2	Fever	Yes	No
12	7 (marks no longer seen)	Maternal grandmother	68	Kidney disease	No (but knew of them)	Yes
13	Adult	Unrelated	42	Edema	No	Yes
14	2	Grandfather	63	Gout?	Yes	No
15	10	Paternal great-grandfather	67	"Old age"	No	No
16	2	Maternal grandfather	62	Cirrhosis	Yes	Yes
17	9	Paternal grandfather	77	Diabetes, stroke, heart attack	No	Yes
18	11	Unrelated	25	Malaria	No (but knew of it)	Yes

to general cases of children who claim to remember previous lives, 70% of which involve deaths by unnatural means (Tucker 2005).

In five of the cases, the mother of the child had seen the body after it was marked. In eight of the others, the mother had heard or may have heard of the marking but had not seen it. This leaves at least 5 of the 18 cases in which the mother of the child did not even know of the marking.

In 6 of the 18 cases, the child made statements about the life of the deceased individual that the family believed involved knowledge that he or she could not have acquired through normal means. These will be described further in the case reports below. We note that five of the other children were four years old or younger when examined, so they may have made statements subsequent to our investigations.

Following are four of the stronger case reports, which illustrate how the phenomenon usually progresses:

The Case of A. W.

A. W. is a girl who was born in Loei province, Thailand. Her maternal grandfather had died five years before. The details of his death are not clear, but he had suffered from gout. Just before his death, he could no longer walk and was apparently cachectic. He died in his home village, a neighboring village to A. W.'s home, when he was 59 years old.

One of his daughters decided to mark his body. She knew about this practice but did not follow a specific tradition. She said she wanted to know whether rebirth would happen. She made a mental wish that her father would take the mark with him whenever and wherever he was reborn. After making this wish, she marked his right leg above the ankle with soot from the bottom of a rice pot. She made the mark about two hours after he had died. She took her index finger and demonstrated to us using our interpreter's leg how she made the mark. When she had marked her father, a number of people from the village were present, but not all paid attention to what she was doing. A. W.'s mother told us that she had seen her sister make the mark on her father. The subject's paternal aunt also told us that she had seen how the body was marked.

After her father's death, A. W.'s mother dreamed more than ten times about him. The first dream occurred approximately seven days after he died. In this dream, he told her that he wanted to live with her again. This was the only dream with this kind of message.

A. W. was born in an uncomplicated delivery in the district hospital five years after her grandfather died. From the time she was born, she had a flat, hyperpigmented nevus on her right leg in a location that seems to be in good agreement with that of the experimental mark on her grandfather



Figure 1. Birthmark on A. W.'s right leg.

(Figure 1). It should be noted here that hyperpigmented nevi rarely occur at birth (Jacobs & Walton 1976, Pack & Davis, 1956, Pratt 1953), and they are found on the arms nearly twice as frequently as on the legs (Pack, Lenson, & Gerber 1952).

We interviewed A. W.'s mother; the deceased's widow and her new husband, who is the deceased's younger brother; two of A. W.'s maternal aunts, one of whom marked the body; A. W.'s paternal aunt; and a neighbor. They all agreed that the events recorded here occurred as indicated.

At the time of the interview, A. W. had said very little that could be related to a previous life. One possible exception was her objection to her mother's interest in gambling. The grandfather had often expressed disapproval of his daughter's gambling. A. W. also had one behavior that may relate to her grandfather: She stood while urinating approximately half of the time; Stevenson (1997) described other cases of girls who urinated while standing up claiming to remember previous lives as males.

The Case of N. N. W.

N. N. W. was born outside of Yangon, Myanmar, and raised by her maternal aunt and her husband. Her maternal grandmother had died of kidney disease at the age of 68, nine years before N. N. W. was born. One to two hours after she died, her daughter (N. N. W.'s aunt) made two marks on her body with soot. One was on the lateral surface of the left leg just proximal to the ankle, and the other was on the medial surface of the right leg on and distal to the ankle. The marking was observed by several people, including family members and a neighbor we interviewed, M. K. M. The subject's mother did not see the marks but knew they had been made.

Before N. N. W.'s mother became pregnant with her, she had three dreams in which her mother said she wanted to come live with her. In the dreams, N. N. W.'s mother initially said no, but N. N. W.'s grandmother became more insistent with each successive dream until her mother finally replied, "As you wish." One month later, she became pregnant. During the pregnancy, she had cravings for tea and cake, Indian spiced food, and milk—foods that she usually did not like. N. N. W.'s grandmother, whose father was Indian, had enjoyed Indian food.

When N. N. W. was born, she had birthmarks that corresponded to the two marks made on her grandmother's body. This was confirmed by her family and by the neighbor, M. K. M., whom we interviewed. She had no other birthmarks, and her two brothers had none. The two birthmarks had faded away by the time N. N. W. was 6 years old, so they were not present when we met her a year later.

N. N. W. began talking at about 18 months of age, and she made a number of statements related to the life of her grandmother. She asked about a mortar that the grandmother had owned, and when her uncle hurt his knee, she said that medicine should be pounded in the mortar and put on his knee. The grandmother also had a shell that she had used during ceremonies. Others in the family did not use shells, but during a ceremony N. N. W. asked about her shell. Both of these questions came before she was two years old, and as a youngster, she frequently talked about the previous life. For example, she asked about her money and jewelry. Her grandmother had apparently been quite well off. The family developed financial problems after her death, and N. N. W. once asked why the family had spent her money. When she was being spanked, she would ask, "Why do you not respect your mother?"

The neighbor, M. K. M., was known to N. N. W.'s family as "Ma Win Kyi." N. N. W.'s grandmother, however, had called her "Daw Win Kyi," and so did N. N. W., even though no one else around her did. She also called her parents and her aunt and uncle by their given names. Children who

claim to remember previous lives frequently call adults by familiar names as adults would do; in Myanmar, this is considered quite rude, as respect for older persons is deep in that culture (Stevenson 1983).

During World War II, the grandmother had lived in Tavoy, Burma, with one of her cousins whom she called "Baby," being the only person to do so. That cousin later lived with N. N. W.'s family for a time, beginning when N. N. W. was five years old. N. N. W. also called her "Baby" and once said to her, "Please shut your ears because the English bombers will drop the bombs." Her family interpreted this as a reference to the bombing of Japanese soldiers in Burma by the English during World War II.

Her family felt sad hearing her talk about the life of her grandmother, so family members tried to discourage her from such talk. They fed her eggs for a time in the belief, common in Myanmar (Foll 1959, Khaing 1962), that this would make her forget about the previous life. The statements became less frequent as she became older, and by the time we met her she generally talked about the previous life only when she was angry or sad. Two days before our meeting, however, she did say to her female first cousin, who was visiting, "You look like my son." The family stated that the cousin does, in fact, closely resemble the grandmother's son (the cousin's father), but he had not accompanied her on the visit.

Along with the statements, N. N. W. had one habit that reminded her family of her grandmother: She would eat with one leg hiked up in her chair. She and her grandmother were the only two in the family to do that. This is similar to a behavior of the subject of a Sri Lankan case, Sujith Lakmal Jayaratne, reported by Stevenson (1977). When Sujith drank, he drew his legs up, as had the person whose life he remembered.

When we interviewed N. N. W. at age seven, she did not say a great deal. She did report a memory of a group photograph being taken. Her family produced a group photograph that included her grandmother. N. N. W. did not identify anyone in the photograph, but she then said she remembered another photograph that had been taken in a particular room of the house (to which she pointed). Her family reported that a group photograph that included her grandmother had, in fact, been taken in that room 25 years before. The photograph had been given to other family members in Tavoy more than 20 years earlier, and N. N. W.'s immediate family members had not thought of it for many years. (The photograph that we saw had been taken prior to the one that N. N. W. discussed, and perhaps its age contributed to N. N. W.'s inability to recognize anyone in it.)

In addition to N. N. W., we interviewed her mother, her aunt, her uncle, and M. K. M., the neighbor. They were all convinced that N. N. W. was her grandmother reborn.

The Case of K. H.

K. H. was born in Meiktila, Myanmar. His father was a merchant and his mother a homemaker. At the time of the interview, he was an only child.

K. H.'s maternal grandfather died 11 months before K. H. was born, at the age of 62. He was apparently an alcoholic, and he died of cirrhosis of the liver. Prior to the ceremony of his burial, his body was marked by a neighbor. She used charcoal from the underside of a pot and touched his left arm with her finger. At the ceremony, many people, including K. H.'s mother, other family members, and neighbors, saw the mark.

When K. H.'s mother was pregnant with him, she and her sister both had dreams of a man coming to them. In her dream a man said, "I want to live with you." K. H.'s mother recognized the man as her father. K. H. was then born in Meiktila Hospital in an unremarkable delivery. At birth, he was noted to have a birthmark on his left arm in the same place where his grandfather's body had been marked. It was reported to be similar in size and color to the marking, though it has subsequently faded somewhat since birth (Figure 2).

Author J. K. conducted the initial interview when K. H. was approaching two years of age. The marker was present, and she demonstrated how she had made the mark. The location she indicated corresponded to that of the birthmark on K. H. At that time, K. H. had not said anything related to a previous life. By the time we returned four months later, however, he had made several statements that the family interpreted as indications that he was the rebirth of his grandfather.

K. H. called his grandmother "Ma Tin Shwe," a name that only his grandfather used for her. Other children called her "Daw Lay," or "Auntie," and her children called her "Mother."

During the interval between our interviews, K. H. was taken to his grandfather's house for the first time. When he met the maid there, he called her "Sein Sein." His grandfather had called her this, but the family stated that K. H. had not been told her name. While at the house, K. H. was asked to pick out the picture of Aung San Suu Kyi, the leader of the democracy movement in which both his grandfathers had been involved. He was able to pick out her picture from among the other pictures there, but given the admiration that the family had for her, it is unclear if this was the first time he had seen a picture of her.

The family also reported that K. H. never called his mother "Mother." Instead, he called her "War War Khine," as his grandfather had done, while others called her "Ma War." K. H. did not make any statements about a previous life to us, and his family reported that he only talked about the previous life when he wanted to, not when he was questioned.



Figure 2. Birthmark on K. H.'s left arm.

The Case of P. S.

P. S. was born in a village of the Sakon Nakhon province of Thailand. He was the third of four children. One of the children was a boy who had died with a fever the year before P. S. was born. He was two years and nine months old at the time of his death. Ten minutes after he died, his maternal grandmother marked his body. She used soot to make a spot on his left jaw, and both parents saw the marking. Six months after that, P. S.'s mother became pregnant, and she then gave birth to him in an uneventful delivery at home. At birth, P. S. had a dark brown spot on his left jaw. Near the spot was a larger area of increased pigmentation that was only faintly visible at the time. As he became older, the spot matching the experimental mark faded somewhat, though it was still clearly visible when he was interviewed. Meanwhile, the larger area became darker, but the original spot was still slightly more prominent (Figure 3). His father had a birthmark on one of his thighs, but there were no other birthmarks in the family.

P. S. was 14 years old when Author J. K. interviewed him. He had not made any statements related to a previous life, and the birthmark was the



Figure 3. Birthmark on P. S.'s face.

only indication for his parents that he was his brother reborn. This case is similar to others J. K. has studied (Keil 1996) that demonstrate a family's belief that an infant is the rebirth of a particular previous personality does not necessarily lead the child to talk later about that person's life.

Discussion

With regard to potential etiologies for experimental birthmarks, the possibility that the correspondence of the marks is purely coincidence certainly has to be acknowledged. The likelihood of a chance correspondence is made less likely when families only look for matches among babies born into the same family. It is also questionable when only one body in the extended family had ever been marked in this way and when this custom is seldom practiced in the community.

There is also the possibility that after a random birthmark occurs, family members' faulty memories about the location of the experimental mark could lead them to think that the birthmark corresponds to it much

more closely than it actually does. It must be noted, however, that several people often see the body after it has been marked. This explanation would thus require faulty memories on the part of several people, perhaps involving peer pressure conformity effects that can sometimes be seen in groups (Asch 1956).

There is also the problem of statements or behaviors by the children that appear to relate to the life of the deceased. While some of the apparent connections may have been misinterpretations or over-interpretations by the families, others seem more difficult to dismiss. One example is N. N. W.'s statements to us about a photograph from 25 years ago. There are also objective behaviors, such as A. W.'s tendency to urinate standing up, that require explanation.

These objections suggest that etiologies other than chance warrant consideration. One would be a psychosomatic theory that is similar to the concept of *maternal impression*. Maternal impressions involve the effects on the fetus of sights that a mother witnesses, and they were a serious topic for discussion in medical journals until about 100 years ago. Some authors argued that a stimulus during and perhaps even before pregnancy that had a significant psychological impact on the future mother, such as the sight of a deformed individual, could cause a corresponding birthmark or birth defect on the child (Ballantyne 1891–1892, Dabney 1890, Drzewiecki 1891). In the West, the concept came to be seen largely as superstition for two reasons. First, when it became known that the nervous systems of the mother and fetus were not connected and that their circulations were separated by the placenta, the fetus was regarded as sufficiently encapsulated to shield it from any temporary physiological and emotional disturbances its mother might encounter during pregnancy (Warkany 1959). Second, during several months of pregnancy any woman may experience a large number of impressions. If her child is born with a birthmark or birth defect, she may then select a suitable impression to explain the defect. In other words, with a prevailing view that a fetus could not be modified by its mother, any apparent correspondences between maternal impressions and birthmarks or birth defects were explained as being due to chance. Today, maternal impression is rarely discussed in modern medical journals other than for historical purposes. Some authors, however, have published reports that attempt to keep the concept alive as one that may have validity (Farkas & Farkas 1974, Stevenson 1992, Williams & Pembroke 1988).

The theory of maternal impression differs from experimental birthmarks in that maternal impressions were usually assumed to be associated with surprising and often terrifying impressions experienced by the future mothers. In countries with a tradition of experimental birthmarks,

however, these negative experiences are seldom regarded as a necessary or even favorable condition for the transfer of markings. In some ways, the experimental birthmark process is more similar to other phenomena of physical changes produced by suggestion. Examples include hypnotic subjects who develop skin reactions matching previous wounds or even burns suggested by hypnotists, as well as individuals, often monks, who develop stigmata, skin markings matching the wounds of Christ. Numerous such case reports were reviewed by Stevenson (1997), and it appears that in susceptible individuals suggestion can have specific and localized physiological effects. As for experimental birthmarks, the question of how the suggestion of a birthmark in a mother's mind would be transmitted to the skin of the fetus remains unanswered, but so does the question of how a suggested injury is transmitted to the skin of a hypnotized subject. While the psychosomatic mechanism for such a process remains unexplained, we now know, of course, that some substances can cross the placenta, and we have evidence that at least in a general way a mother's emotional state can affect the fetus (Glover 1997, Lou et al. 1994).

If one accepts the premise that maternal impression can be considered as an etiology for experimental birthmarks, then there is still the question of whether it provides a satisfactory explanation for all of the details of the cases. Mothers of the subjects saw the marks on the deceased in only five of the cases. They heard, or may have heard, of the markings in eight others, but in at least two of these they did not know the site of the markings. That leaves at least five cases in which the mother did not even know of the mark on the deceased. Thus, although there are some cases in which the maternal-suggestion hypothesis provides a possible explanation that deserves serious attention, there are others in which the evidence for it is quite weak.

Another explanation is that experimental birthmarks represent a phenomenon of consciousness. There are two types of consciousness-mediated processes to consider. The first would be one in which the prayers and wishes of the mourning family effected the development of the birthmark. Several double-blind studies in the medical literature have provided preliminary evidence that intercessory prayer or distant healing can have positive effects on the health of others with conditions such as heart disease and AIDS (Astin, Harkness, & Ernst 2000, Byrd 1988, Harris et al. 1999, and Sicher, Targ, Moore, & Smith 1998). This is consistent with more than 800 experiments in the parapsychological literature suggesting that consciousness can affect physical systems (Radin & Nelson 1989). Even these provide little basis for the idea that a prayer at a funeral could influence the fetal development of a child born months or years later, but they suggest that the possibility should not be rejected out of hand.

The other consciousness-related explanation involves what the villagers believe: that there is a continuation of the consciousness of the deceased individual in the child born with the birthmark. While this possibility may be the most speculative, it should be noted that Stevenson collected more than 2500 cases of children who appear to remember previous lives (Stevenson 2001) and more than 200 cases of children with birthmarks that correspond to wounds or other marks on the body of the identified previous personality (Stevenson 1997). Taken in that context, the six cases in our series in which the child made statements related to the life of the deceased individual indicate that this explanation warrants consideration.

Conclusions

In summary, these cases of experimental birthmarks may well represent a heterogeneous group. At this point, it is not clear if all of the cases arise merely from coincidence, but some have features that strongly suggest otherwise. Whether these cases represent a psychosomatic phenomenon, a consciousness-mediated one, or some other process, they at least deserve more study. After our investigations, we learned of 20 more cases: 14 in Thailand and 6 in Myanmar. If more cases are studied, it should be possible in the future to conduct statistical analysis of particular features that will allow for a better understanding of the processes involved.

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