Journal of Scientific Exploration, Vol. 19, No. 3, pp. 359–383, 2005 0892-3310/05

Some Bodily Malformations Attributed to Previous Lives

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Abstract—Bodily malformations that are unusually large or otherwise unusual in shape or location occur somewhat rarely. Sometimes a young child having such an abnormality speaks about the life of a deceased individual who suffered a wound that is said to have corresponded somehow to the abnormality. We aimed at investigating the justification for attributing malformations to wounds in a particular deceased person. Cases of this type occur frequently in Asia, but also in Western countries. The principal method of investigation is interviews with firsthand informants for the subject and concerned deceased person. Medical reports, such as postmortems, are examined when available. In Part I we present three reports of skin anomalies and tabular summaries of an additional five cases. We have obtained evidence of a close correspondence between the skin anomalies and the wounds on the concerned deceased person, although the evidence is not conclusive. In Part II we report four cases of birth defects attributed to previous lives. We present and discuss some evidence, again not conclusive, that tends to support this attribution.

Keywords: unusual skin anomalies—previous lives—birth defects—malformations

Introduction

This paper reports 12 cases of malformations, most of them unusual, that informants attributed to wounds in previous lives. We precede the case reports with a summary of typical features of cases of children who claim to remember previous lives; we follow this with a description of our methods of investigating the cases.

Typical Features of the Cases of Children Who Claim to Remember Previous Lives

Children who speak about previous lives usually begin to do so between the ages of 2 and 4. In a group of 458 such children the mean age for first speaking about a previous life was 37 months. Most of the children continue to make references to the previous life until the ages of 6 to 8. In a group of 135 cases the mean age of ceasing to speak about the previous life was 7½ years. The number and content of the children's statements vary widely. Most of the children, however, refer to the mode of death in the previous life. In a group of 419 cases, 74% referred to the mode of death. Violent death figured in these cases much more than in the general populations where they occur. In a group of 536 cases the concerned deceased person died violently in 274 (51%) of the cases. (The data given in this paragraph were first published in Cook et al., 1983; information could not be obtained about some features.)

Apart from the mode of death, the children's statements tend to cluster around the last years of the previous life. Many children compare that life with the "present" one, sometimes with outspoken preference for the former. Many ask and a few demand to be reunited with their "real" family.

Behavior that is unusual in the child's family but that accords with his or her statements often accompanies them. For example, many of the children show phobias of the persons, weapons, or place figuring in the death they describe. Among 387 children of these cases such phobias occurred in 141 (36%) (Stevenson, 1990). Unusual play occurs often. In a series of 278 cases, 66 (23.7%) of the children engaged in play that was unusual in their families and had no model in family members or other obvious normal stimulus. The play usually repeated, within the child's capacity, the vocation or avocation of the person whose life the child claimed to remember (Stevenson, 2000). Some of the children show habits of that person's religion or sex, if these differ in the lives of the child and deceased person.

One or more of these features occurred in the group of cases here reported, although it does not include a case of the sex-change type, a feature found commonly in the cases of Myanmar, but not at all in some other cultures, such as that of the Druses of Lebanon.

Malformations (skin anomalies or substantial birth defects) occur frequently in these cases. Among 895 cases from nine different countries or cultures, 309 (35%) of the subjects had such a malformation (Stevenson, 1993).

Children of this group are found most easily in countries and cultures with a tradition of belief in reincarnation, but they also occur in Europe (Stevenson, 2003) and North America (Stevenson, 1983) where such a tradition does not exist. Two of the cases reported here occurred in the United States.

Methods of Investigation

Interviews with firsthand informants were the principal method of investigation. For the subject's side of the case, these are the subject's parents,

older siblings, and other senior family members. We may also interview other informants, such as neighbors, provided they are firsthand informants. We talk with the subject if he or she agrees to talk with us. For the side of the concerned deceased person, we interview surviving relatives, such as the spouse, parents, and siblings. In our interviews with both families, we try to learn the basis for their belief that the subject is the reincarnation of the identified deceased person.

We do not pay informants for time spent with us. Occasionally, we reimburse an informant if he or she has missed a day's work or traveled a substantial distance in order to meet us. Most of the informants have only a primary school education.

In many cases the concerned deceased person was a member of the subject's own family or a person known to its members. Our interviews include careful attention to the possibility that older persons who are members of the subject's family or in frequent contact with the subject's family have somehow influenced the subject to identify himself or herself with the deceased person.

As mentioned, violent deaths often figure in these cases, and we try to obtain and copy any available printed records about such deaths. These include police reports, hospital records, and postmortem reports.

We examine and photograph the malformations. Notes and sometimes sketches supplement the photographs with details about the appearance of the affected skin, such as the color, pigmentation, and any elevation or depression of the abnormal area in relation to surrounding skin. We also borrow or examine any relevant photographs available from the subject's family.

We did not have a professional medical relationship with the subjects of these cases, and therefore we do not refer to them as patients.

Part I

Introduction to Cases with Skin Anomalies

Nearly everyone has one, several, or more numerous skin anomalies of which the most common are areas of increased pigmentation, popularly called moles and called melanocytic nevi by dermatologists. Comparatively few of these anomalies are present at birth. Their incidence in newborns varies in different groups from 1% (Castilla et al., 1981; Walton et al., 1976) to 2.4% (Pack & Davis, 1956) and 2.7% (Pratt, 1953). They do not occur with equal frequency on all parts of the skin. They occur much more often on the trunk, upper extremities, neck, and head than on the lower extremities. On the head, they almost never occur above the hairline (Pack et al., 1952).

Little is known about the causes of nevi. A particular gene has been implicated in one type, called neurofibromatosis, which is characterized by multiple areas of increased pigmentation. Investigations have suggested that the number as well as the location of nevi may be inherited in some families (Denaro, 1944; Estabrook, 1928). Nevertheless, only a few pedigrees showing such inheritance have been published.

Most nevi and other skin anomalies are small and less than 3 cm in diameter. Parents who notice these small abnormalities on their children usually give them little attention. Larger ones, however, stimulate conjectures about the origin of such unusual and sometimes disfiguring abnormalities. The parents, and the child itself when older, may yield to the need to find a cause for one.

In cultures having a belief in reincarnation, adults may attribute large or otherwise unusual skin anomalies to a wound or other lesion obtained in a previous life. In some cases, they identify a child as the reincarnation of a particular deceased person before he or she has spoken about a previous life or even when he or she never speaks about one (Keil, 1996). Dreams about that deceased person, usually had by the subject's mother, may contribute to the identification.

Case Reports

The Case of AL'

AL was born in 1983 near Loei in northeastern Thailand. Shortly before his mother became (unexpectedly) pregnant with him, she dreamed of her deceased father-in-law, WL, who said (in the dream) that he wished to be reborn as her child. WL had been fatally injured in a vehicular accident in 1981, when he was 64 years old.

Investigation of the case. Jiirgen Keil (J.K.) investigated this case in 1997. He interviewed AL, his parents, a paternal uncle, the man who transported WL to the hospital after he was injured, and three members of AL's family who saw WL's body after his death.

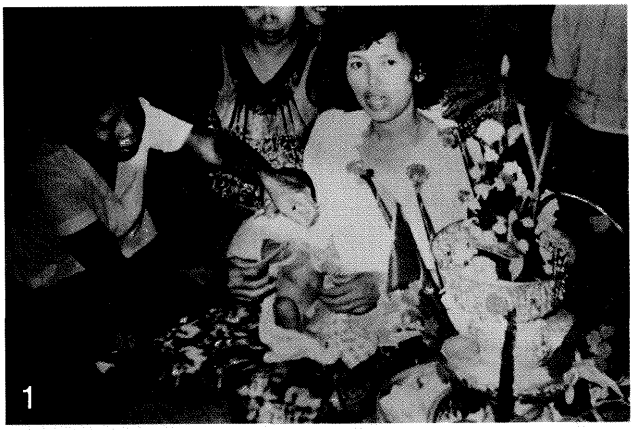
The affected skin on AL. Figure 1 shows the appearance of AL's abdomen a few days after his birth. An area of increased pigmentation across the abdomen can be seen. Figures 2 and 3 show the appearance of the abnormal skin in 1997, when AL was 14 years old. The abdomen and right flank of the trunk had extensive areas of scarlike skin, some of which still had increased pigmentation. These areas are consistent with residues from the healing of extensive areas of undeveloped skin (called aplasia cutis).

Birth and early life of AL. AL's gestation and birth were uneventful. Almost immediately after his birth a nurse who was cleaning him up noticed widespread abnormalities in the skin of his abdomen. The skin of this area seemed transparently thin, so that, informants said, the organs beneath it were discernible.

In childhood AL was frail, and his parents were told that he had a disease of the spleen. He received frequent blood transfusions. In adolescence, however, he seemed healthy and robust.

AL never spoke about a previous life—that of WL or any other. Once when he was shown a photograph of WL, he looked at it for a long time, smiled, but said nothing.

The injuries and death of WL. On the day of his death WL was engaged in transporting some rice. He was riding a bicycle to which he had attached a trailer



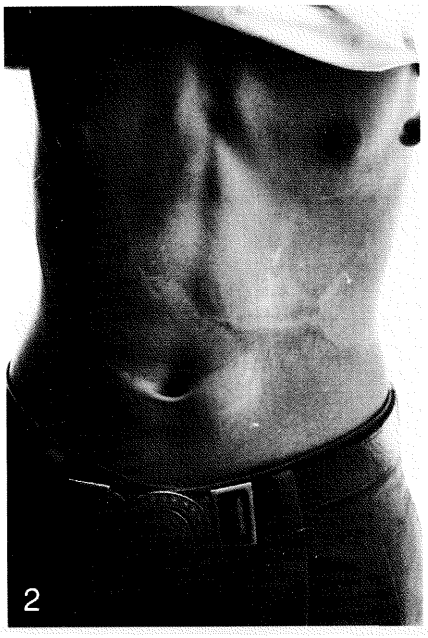


Fig. 1. AL as an infant a few days old, showing increased pigmentation of the abdomen (top).

Fig. 2. Lower chest and abdomen of AL at age 14, showing areas of increased pigmentation and scarlike appearance (bottom, left).

Fig. 3. Right side of AL at age 14, showing areas of increased pigmentation and scarlike appearance (bottom, right).

loaded with the rice. He was traveling on a highway with substantial traffic from other vehicles. Suddenly there was an unexpected disturbance in the traffic. A motorcycle veered to the side and hit WL's trailer with an impact that knocked him off his bicycle and then dragged him on his abdomen for some distance. At least

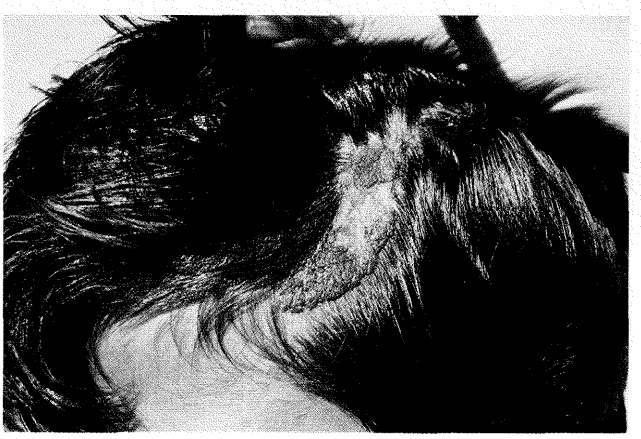


Fig. 4. Nevus on head of NK. Hairless, wrinkled skin with areas of unusual roughness.

one handle of the bicycle became driven into his abdomen, and he bled profusely. (A witness to the accident furnished the information in this paragraph.)

WL was taken to a hospital, where he died almost immediately. J.K. could obtain no record from the hospital, possibly because there was none. (WL might have been declared "dead on arrival," which might have excused the hospital from making a record.) J.K. was able to study a police record, which blamed the accident on the motorcyclist but furnished no details of WL's injuries.

At the hospital, WL's body was cleaned up, and the major abdominal wounds were stitched. The body, dressed in WL's clothes, was then returned to his family. Members of the family, when viewing the body, opened the trousers and could see that there were extensive stitches in the abdomen.

Comment. In the absence of any statements about a previous life by AL, the belief that he is the reincarnation of WL depends, along with the dream in which WL appeared to AL's mother, largely on the correspondence between the unusual abnormality of AL's skin and the reported injuries on WL.

The Case of NK

NK was born in the village of Kharwa, near Ajmer, Rajasthan, India in 1982. He had a linear area of abnormal skin (called a verrucous epidermal nevus) on the left front area of his head (Figure 4). NK started walking and talking at about the same time, when he was a little more than a year and a half old. When he was still a toddler and was rebuked, he would walk away from his family's house. When asked where he was going, he would reply, "I am going to my village." When asked where his village was, he would say, "I am from Sarnia. My wife is Dakho, and my son is Madan." He rejected the name he had been given and said, "I am Babu." He talked about the life of Babu until he was 5 or 6 years old. He described how Babu had been waylaid by robbers who killed him with an axe for

the money he was carrying. The details he stated corresponded to the life and death of a man called Babu who had been murdered in 1978. NK's family knew about the murder, but the two families became acquainted only after Babu's family learned about NK's statements.

The investigation of the case. Satwant K. Pasricha (S.K.P.) learned about this case in May 1998 and started to investigate it in December 1998. At that time S.K.P. interviewed NK's mother; NK's father was not available. She also interviewed and examined NK and interviewed four members of Babu's family. From the information obtained, she was then able to study a police report of Babu's murder. Subsequently, S.K.P.'s assistant, Ashraf Valli, obtained for us a copy of the postmortem report on Babu. It seemed important to interview NK's father. Accordingly, in 2001 Ian Stevenson (I.S.) and S.K.P. together sought him out at his workplace in Beawar. They also met, interviewed, and again examined NK at the town where he was going to school.

NK's nevus. Figure *4* shows the large nevus on the left temporo/parietal area of NK's head. In 1998 it was 7.5 cm long and 2 cm wide. The skin was wrinkled and had increased pigmentation. Within the affected skin there were two slightly elevated areas of unusual roughness.

The life and death of Babu. Babu was a young married man who lived in the village of Gwadia, where he had been born. He owned a small tea shop in another village called Sarnia, which is about 2.5 km from Gwadia. He was murdered while returning from Sarnia to Gwadia. (NK said that two men stopped him on the pretext of wanting a match to light a cigarette.) The murderers struck him on the head and elsewhere with an axe, dragged his body to a nearby well, and put it in the well, where it was found. Two men were later arrested for the crime but were acquitted for lack of evidence. Kharwa (NK's birthplace) is 6.5 km from Sarnia.

The postmortem report described three incised wounds on the body of Babu. There was a small wound of the jaw and a larger one on the left shoulder and root of the neck. A third wound included fractures of the bones on the left side of the skull with a deep penetration into the brain substance. This was presumably the fatal wound. This also corresponded with the area of abnormal skin on the left side of NK's head.

NK had no abnormalities corresponding to the other incised wounds noted in the postmortem report.

Statements made by NK. Informants credited NK with 19 statements about the life and death of Babu. Of these, seven were about Babu and members of his family; they were all correct. In the remaining 12 statements, NK described how robbers had waylaid him and killed him. As there were no witnesses to the murder, most of these were unverifiable, but the police report verified four of them. In addition, informants credited NK with spontaneously recognizing five members of Babu's family when they met him.

NK's family became concerned that he would succeed in running away from home. They tried to suppress his talk about the life of Babu and even beat him for speaking about it.

Comment. This case has two unusual features. First, the subject made more statements than have most subjects of these cases, and all the verifiable statements were correct. Second, a postmortem report was available, and it showed a close correspondence between the subject's skin anomaly and a fatal wound on the person whose life the subject claimed to remember.

The Case of PM

PM was born of American parents in the Midwestern United States in 1992. His mother, upon first seeing him after his birth, believed that he was an earlier deceased son who had come back to her. (Although formally a Christian, she believed in reincarnation.) That son, KC, had died in 1980 of complications of neuroblastoma, a type of cancer mostly affecting young children. He had been younger than 2 years old. PM's mother had afterwards divorced, remarried, and given birth to three more children, a daughter and two sons. Her conviction that PM was KC reborn became stronger when, soon after PM's birth, she noticed a dark line on his neck, an opacity of his left eye, and a swelling on his scalp above his right ear. These corresponded to lesions that KC had before he died. PM also limped when he began to walk, as KC had done. When he was about 4½ years old, PM made several statements suggestive of memories of events in KC's life.

The investigation of the case. Jim Tucker (J.T.) and I.S. learned of this case in 1998, and shortly afterwards visited the family. They examined PM and obtained records of his ophthalmological examinations. They interviewed PM's mother, father, maternal aunt, and KC's stepfather; and they obtained copies of KC's medical records at a tertiary care hospital. In 2000 they returned to the family for further interviews and to observe PM's later development.

PM's abnormalities. PM had a dark slanting mark on the lower right front surface of his neck (Figure 5). It looked as if it might be the opening of a small cavity, and PM's mother said that it had once oozed. There was a roundish swelling about 1 cm in diameter above his right ear. By 1998 (when PM was 6 years old) what had once been an area of opacity of the left eye had diminished, but some opacity remained. The left eye also showed imbalance in its muscles (esotropia). Its visual capacity, impossible to measure exactly, was no greater than 201200. PM was also observed to limp when he walked, as if sparing his left leg, and his mother said he had done this since beginning to walk.

The illness and death of KC. KC was born in early 1978. He was in good health until, at the age of about 16 months, he began to limp. After he fell one day, a medical examination showed a pathological fracture of the left tibia. In October 1979, he was admitted to a tertiary care hospital, where radiological examinations and biopsies of the bone marrow and a swelling on his scalp above his right ear showed that he had neuroblastoma and that it had spread. His left eye was protruding and seemed to have bled slightly. An intravenous line was placed in a vein on the right side of his neck. KC was then started on radiation

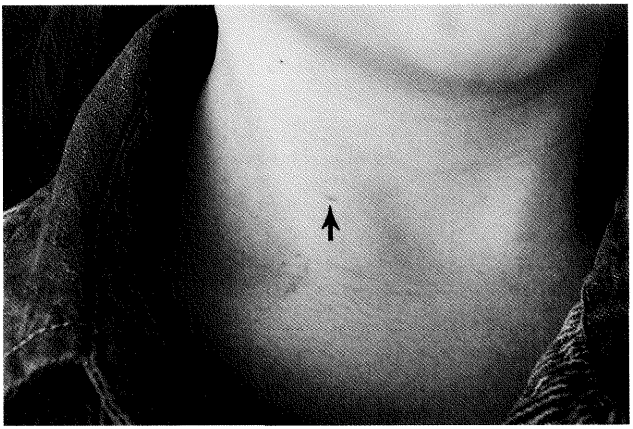


Fig. 5. Anomaly on lower anterior surface of neck of PM, indicated by arrow.

therapy and chemotherapy. He was discharged in November but was readmitted a few months later, in April 1980. He then had several affected areas of the mouth and some bleeding from them. He had become blind in the left eye. He was discharged a few days after his admission and died at home 2 days later. There was no autopsy, but we obtained medical records that fully confirmed the history given by PM's mother and furnished the other inforination presented here.

Statements made by PM. Beginning at the age of about 4½ years, PM made statements referring to the life of KC. He talked about wanting to return to the family's previous home, giving an accurate description of it, and he told his mother that he had left her there. He also described surgery on his scalp where KC had undergone a biopsy. Shown a picture of KC, he said that it was of himself. He made these statements to his mother. Other family members whom we interviewed could not remember any specific statements that PM had made about the life of KC in their presence.

PM's *unusual behavior.* On two different occasions we spent several hours with PM and his family. We could observe that he liked to be with his mother more than the other children of the family. We should note, however, that his mother said she was more solicitous about him than she was about her other children.

Comment. This case raises the question of the extent to which the wish of PM's mother to have KC return could have influenced PM's development. She may have over-interpreted his statements about KC's life or even have induced him to make them. That she could have influenced him to limp seems doubtful. The con-espondences between the dark mark on PM's neck, the swelling above his right ear-, and the opacity of his left eye with known abnormalities on KC (the intravenous placement in the neck, the biopsied scalp swelling, and the blind left eye, respectively) seem to require some explanation other than chance.

Table 1 summarizes the principal features of an additional five cases that we have investigated.

Discussion of Part I

The skin anomalies on six of the eight subjects are either unusually large or unusually long. Readers may ask how common such anomalies of the skin are. In a survey of more than 500,000 infants, Castilla et al. (1981) found an incidence of giant pigmented nevi (defined as 10 cm or more in diameter) in 1 in 20,455 newborns. The anomalies of our subjects are therefore not commonplace.

The skin anomalies on the other two subjects had unusual features. The two on ND (noted in Table 1) were in somewhat unusual locations and corresponded in size to bullet wounds of entry and exit. The difference in their sizes corresponds to the fact that bullet wounds of exit are nearly always larger than wounds of entry (Fatteh, 1976; Simpson & Knight, 194711985). The principal abnormality on PM (on his neck) had the appearance of a small opening; moreover, it and three other abnormalities on PM corresponded to wounds or other abnormalities on KC that medical records verified.

Although rare, large or otherwise unusual skin anomalies do occur, and textbooks of dermatology often illustrate them. For example, Freedberg et al. (1999), Habif (1996), Solomon & Esterly (1973), and Soter and Baden (1991), all published illustrations of what dermatologists would call large melanocytic nevi. Freedberg et al. (1999) and Rassner (1994) published illustrations of large nevi with roughened skin. The authors of these texts have little to say about the cause of such abnormalities beyond commenting on the occurrence or absence of a relevant family history and other concomitant congenital abnormalities.

We are concerned here, however, less with the unusual size or appearance of the skin anomalies than with the phenomenon of their attribution to previous lives. This brings us to the question of whether the anomalies we report actually correspond closely to the wounds or lesions of the deceased persons. Here we confront a weakness in the testimony. Except in the two cases for which we obtained medical reports, our judgment about the correspondence between the anomalies and the wounds to which they were attributed depends on oral testimony. Moreover, nearly all the informants for the relevant wounds on a deceased person had already seen or learned about the subject's anomaly or anomalies. In cultures with a belief in reincarnation, informants may tend to harmonize their memories of the wounds with their knowledge of the skin anomalies. Supposing this to have happened, however, we have still to explain the occurrence of the skin anomalies themselves.

Also needing explanation are the statements by which most of the children claimed the identity of the relevant deceased person. We have no reason to believe that adults coached them to make these statements. While the children might have assimilated information about the deceased person without their or their parents' awareness that they had done so, this assumption leads to another

TABLE 1
Summary Information about Five Additional Cases of Unusual Skin Anomalies

Subject	Sex	Country	Location of anomaly	Size of anomaly	Features	Corresponding to	Relationship between subject and deceased person	Subject spoke about life of deceased person	Comment
WK	F	Burma	Back of neck	8 cm long 3 cm wide	Abnormal flow of blood (hyperemia); some swellings with roughened skin and increased pigmentation	Fatal knife wound at back of neck	None	Yes	Sex-change case
KSL	M	Burma	Chest and right arm	Extensive irregular patches in area of chest 15 cm by 6 cm; entire surface lateral aspect of right arm	Hyperpigmentation	Fatal injuries when body was dragged over gravel and ties of a railway line	Deceased person was an employee of the subject's father	Yes	
ND	F	Turkey	a) Beneath chin b) Summit of head	a) Roundish 0.7 cm b) 2 cm by 5 cm roundish	a) Hyperpigmentation b) Hypopigmentation	Bullet wounds of entry and exit	None	Yes	
OG	F	Turkey	Front of neck	12 cm by 6–7 cm	Hyperpigmentation; some abnormal growth of hair	Strangulation	None	Yes	Two families were of different religions
SM	F	Turkey	Neck	Linear area across entire front of neck	Abnormal flow of blood (hyperemia)	Fatal throat cutting	None, but two families were neighbors	Yes	

question: that of why a child would wish to assume another person's identity. It should not surprise us, therefore, that informants for these cases usually think reincarnation the best explanation for them.

Exploring the thoughts that parents or patients have about the possible cause of a skin anomaly may be helpful in all cases of large or otherwise unusual skin anomalies or birth defects. As the case of PM indicates, beliefs that they are related to a past life can occur even in cultures without a general belief in reincarnation.

Part II

Introduction to Cases with Birth Defects

The causes of many birth defects remain unknown. In large groups of them, when known causes such as chemical teratogens (e.g., thalidomide), viral infections, and genetic factors are excluded, as many as 43% (Nelson & Holmes, 1989) and even 65%–70% (Wilson, 1973) have been assigned to the category of "unknown causes." Children who claim to remember previous lives sometimes have birth defects that their parents and sometimes the children themselves attribute to injuries in such a life. Some of the birth defects in these cases are of unusual types and do not conform to the "recognizable patterns of human malformation" (Smith, 1982). Two of us have published reports of cases with birth defects similar to some of those here reported, such as absence or shortening of part of or all of the limb (ectrodactyly, brachydactyly, and hemimelia) (Pasricha, 1998; Stevenson, 1997).

Case Reports

The Case of IA

IA was born in the small town of Kanoi in Uttar Pradesh, India, in November 1982. His parents were well-educated Moslems of the Sunni branch. His father was a mid-level government employee. IA's mother's pregnancy with him was not uneventful, because her father was murdered (shot in the back) when she was in its sixth month. The gestation was nevertheless normal, except that IA's birth was postmature.

Almost immediately after IA's birth, his mother observed that he had severe malformations of his fingers and toes (Figures 6–8). During his infancy these sometimes bled and became infected. One finger became so frequently infected that his parents had it amputated. No other member of the family had malformations like those of IA. There was also no history of any other malformations in the families of both of IA's parents.

When IA became able to speak he said that he was from a place called Dapta Balia, and he described his life and death there. He said that he had been a

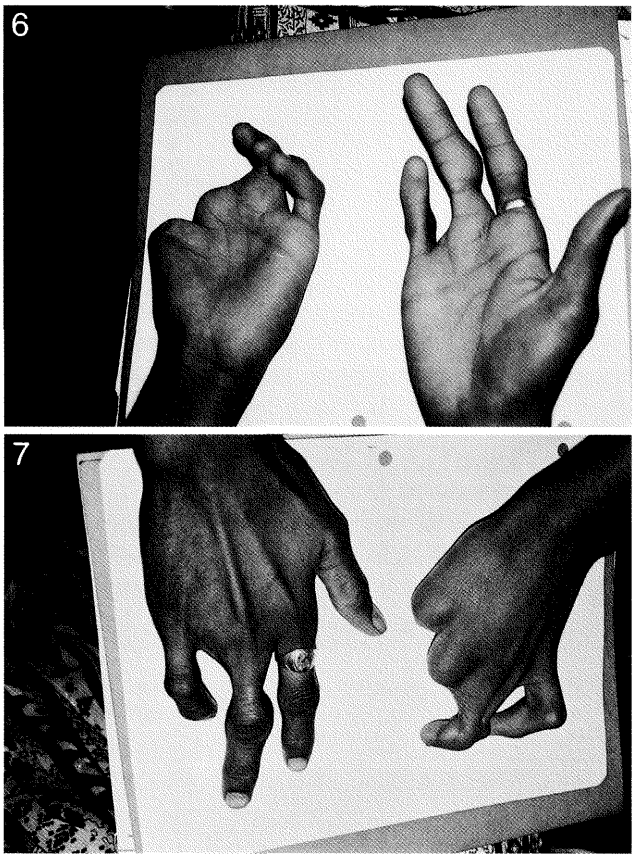


Fig. 6. Severe malformations of IA's fingers (top)
Fig. 7. Severe malformations of IA's fingers (bottom)

dacoit, as bandits are called in India, and that his own gang members had tortured and killed him.

The investigation of the case. The maternal great-grandparents of IA lived in a village described as "near" Dapta Balia. This would mean less than 20 km apart. After learning of IA's statements, his maternal grandfather had gone to Dapta Balia, where he learned about a dacoit who had been killed there. He had, however, not learned any particular details that we could consider an adequate verification of what IA had been saying.

We first learned about the case in November 1998. In December 1998, S.K.P. went to Kasganj (another small town of Uttar Pradesh) where the family was then living. She had lengthy interviews with IA's parents, his sister (5 years older than IA), and a friend of IA (who had known him for about 2 years).

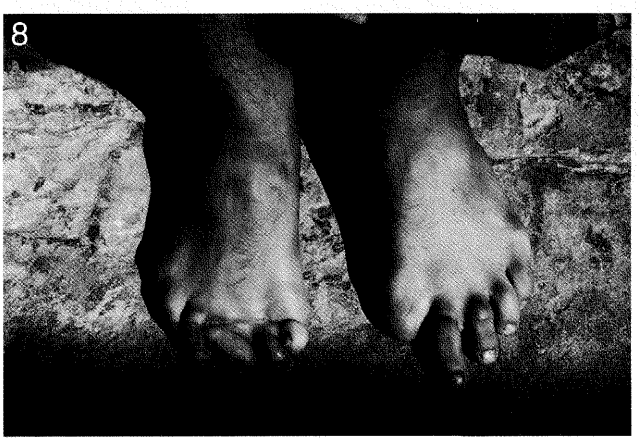


Fig. 8. Severe malformations of IA's toes

In December 2000, S.K.P and I.S. met IA's parents again. On this occasion his mother was the principal informant. IA was away at this time. I.S. wished to examine his malformations, and so he and S.K.P. returned to the family again in December 2000. On these later visits we obtained no additional information about IA's statements or behavior.

In the meantime, S.K.P had sent her Research Assistant, Ashraf Valli, to make inquiries at Dapta Balia and the surrounding villages. He consulted a number of elderly persons and had the records of the local police station searched. In the late 20th century this was a somewhat lawless part of Uttar Pradesh. Ashraf Valli learned of several dacoits who had been active in the area prior to 1980. Some had died natural deaths, and others had been killed by the police or angry villagers. A possible exception to these exclusions was a dacoit named Jagan. One informant thought his gang members had killed him. Jagan was not from Dapta Balia, but from another village that was 1 km away. We decided to enquire further about him. In March 2001, S.K.P. and I.S. went to the area of Dapta Balia and interviewed Jagan's brother and some other older villagers. We learned that Jagan had indeed been a dacoit, but he had been killed by villagers. In sum, IA's statements have not been verified.

Statements made by IA. When IA was about 2 years old, he went out of the house and walked down the road. His mother caught up with him and asked him where he was going. He said that he was going home where "his" mother and daughters lived. His mother protested that she was his mother. IA then explained that he was from Dapta Balia, where "his" family lived. He gave detailed directions for going to Dapta Balia, which is a village (in fact, twin villages close to each other) about 95 km from Kanoi. He further stated that he had been the leader of a band of dacoits. He described how he and his gang had looted a village and in the evening agreed to divide the booty on the following day. Normally the leader of a band of dacoits receives half the loot, the other half

being shared by the other gang members. IA said that the other members of his gang suspected him (that is, the person whose life he was remembering) of cheating them in the division of the loot. They tied him up, tortured him by chopping his fingers and toes with a large knife, choked him, and left him to die.

IA spoke frequently about the life he said he remembered until the age of about 6 years. Thereafter he spoke less, but at the age of 16 years he said he could still remember some details of the previous life.

IA's unusual behavior. During his early childhood IA was greatly preoccupied with the need to have "his" daughters married. (The great expense and complexities of dowries make the marriage of daughters a matter of much more importance to fathers in India than it is to those in most other countries.) A second motive for his wish to go to Dapta Balia was that of regaining the stolen treasure he claimed to have buried there. It was enough, he said generously to a friend, to last a lifetime. He threatened to go to Dapta Balia and sometimes left the house to do so.

Considering himself a Hindu, and one of fairly high caste, IA refused to eat meat and to say Namaz (Moslem prayers) until he was 8 years old. He grumbled at finding himself in a Moslem family, and until later childhood he would not join other family members in their annual month of fasting (Ramadan). On the contrary, he never missed an opportunity to participate in Hindu festivities.

IA said he remembered the names of the gang members who had killed him in the previous life, and he threatened to revenge himself on them. When he was 3 to 4 years old, he played at dacoity, imitating a gun with a branch of a tree and organizing his playmates into a gang of which he was the leader.

IA sometimes showed repentance for having killed so many people in his activity as a dacoit. He did not, however, regard the malformations of his hands and feet as a retribution for the murders.

The attitude of IA's family toward his statements and behavior. Sunni Moslems do not believe in reincarnation. IA's family had never heard of a child claiming to remember a previous life. Nevertheless, IA's familiarity with the geography of the area around Dapta Balia and of how to go there from where the family then lived astonished them as being quite beyond his normal knowledge. They did not, however, approve of IA's initial rejection of Islam and his threats to go away or attempts to do so. Their attitude toward him improved as he, in later childhood, adapted to Moslem beliefs and practices. We can be certain, however, that they never encouraged IA to claim that he had been a Hindu dacoit in a previous life. They cooperated fully with our investigation.

IA's birth defects. Figures 6 and 7 show the severe malformations of IA's hands. We judge that the ring finger of the right hand was the one that was most liable to infection and was amputated surgically. The remaining fingers are shown; the middle finger has a constriction ring. The fingers of the left hand are either extremely misshapen or absent; the rudimentary ring finger of this hand has a constriction ring. Figure 8 shows severe malformations of several toes. Several also have constriction rings.

Comment. Although IA's statements remain unverified, we ask readers to consider the case as a whole. The malformations are not its only feature, although bleeding and repeated infections of the fingers suggest recent wounds; we have not found this feature reported in the literature of congenital anomalies of the hand.

The malformations require some explanation, but so does IA's unusual behavior. Among such behavior we count his rejection of his family and his concern to return—as he saw his situation—to Dapta Balia in order to recover his buried treasure and marry off his daughters. We might regard these attitudes as expressions of childish fantasies. We cannot, however, say this of his rejection of Islam and strong preference for I-Iinduism.

Constriction rings (or bands) are not just a curiosity of pregnancy. They are sometimes associated with detachment of limbs (uterine amputations) and strangulation of the umbilical cord, which may be fatal to a fetus. Torpin (1968) estimated the incidence of constriction rings (or bands) at between 1 in 5,000 and 1 in 15,000 live births. He did not state the basis for his estimate. Nevertheless, it accords with results from surveys. Mastroiacovo and Calabro (1980), from a survey of 160,000 births in Italy, found an incidence of 1 in 14,500 births. In another survey Baker and Rudolph (1971) found an incidence of 1 in about 10,000 births.

Experts have extensively debated the cause of constriction rings. Torpin (1968) was one of the first investigators to attribute uterine amputations to ruptured and entangling amniotic bands. Amniotic bands have been observed in many instances, sometimes during pregnancy (Pedersen & Thomson, 2001; Schwarzler et al., 1998). The phrase "amniotic band syndrome" appropriately applies to these cases.

Amniotic bands, however, cannot account for all cases of constriction rings. They cannot, for example, explain cases of monozygotic twins having one amnion (a surrounding sac within the uterus) but with only one twin affected (Lockwood et al., 1988). The bands or rings may arise from a failure of embryonic development (Abbe, 1916; Streeter, 1930). According to this explanation the appearance of a "band" or even a "ring" may be illusory; there is simply an inhibition of normal development at the sites affected. The phrase "constriction ring syndrome" may be appropriate until further understanding of cases without involvement of the amnion occurs (Al-Qattan, 2000; Kohler, 1962; Moerman, et al., 1992).

In some cases published elsewhere, we have found evidence of a correspondence in location between the constriction rings on the subject and the wounds on the deceased person concerned (Stevenson, 1997). We offer no such evidence for the case of IA. It remains conjecturable, however, that the murderous cutting of limbs that IA described somehow influenced his embryonic development.

The Case of NS

NS was born in May 1981 in a village of Etah District, Uttar Pradesh, India. His father was a farmer of modest means. A few days after NS's birth his mother

noted that NS had no muscle on one side of his chest (Figure 9). He also had a small area of increased pigmentation within the defective part of the right chest. (We did not learn whether NS's parents had noticed this birthmark before he drew attention to it himself.)

When NS was just beginning to speak, he noticed a man from a nearby village, Millawali, and called out to him. He had recognized this man and somehow conveyed to him that he (NS) was called Mulayam and had lived in Millawali. The man he seemed to recognize informed people of Millawali about what NS had said. Villagers from there, including children of Mulayam, then came to see NS, who appears to have satisfied them about his knowledge of the life and death of Mulayam. He described many details of Mulayam's murder.

The investigation of the case. We learned of this case in December 2001, and in that same month S.K.P. went to NS's village and interviewed him and his father. Some bystanding villagers added further information. NS's mother was then out of the village. In September 2002, S.K.P and I.S. went to NS's village where we talked further with him and his father. We also interviewed his mother. We then went to Millawali where we had a less than satisfying interview with Mulayam's son and a more helpful one with the headman of that village. We went to several police stations of the area in the hope of obtaining some record bearing on Mulayam's death. We learned nothing from them, perhaps because of changes in the staffs. According to NS himself, Mulayam's body had been thrown into a canal from which, presumably, it was never recovered. Mulayam was a miscreant, and he may never have been reported as "missing."

Statements made by *NS.* In middle childhood, nearly all the subjects of these cases forget the memories of a previous life that they seem to have in early childhood. NS, then in his early 20s, claimed that he remembered as much then as he ever had. His father listened quietly to what NS told us about the life and death of Mulayam, and we could regard him as giving tacit consent to his son's narration. We must note, however, by that time NS could have learned normally some or much of what he told us about Mulayam.

NS said that he, as Mulayam, had been a police informer. He had also engaged in helping villagers in their official transactions with the police. He charged the villagers for helping them and gave half his fee to the police. He had some companions who initially worked with him as associates in this system of bribery. After a while he learned that his companions were active in the scheme independently of him and sharing less with the police than he did. He told the police about this, and they beat up his companions. As a result, his companions went from being his friends to becoming his enemies. They enticed Mulayam to accompany them in response to a new request for their help. Then they captured and killed him. In doing so, one of his murderers struck him forcefully in the chest with his knee. (In describing this, NS said: "He broke my chest with his knee.") The same man then shot him, also in the chest. Asked where the bullet struck him, NS pointed to the area of increased pigmentation in his right chest

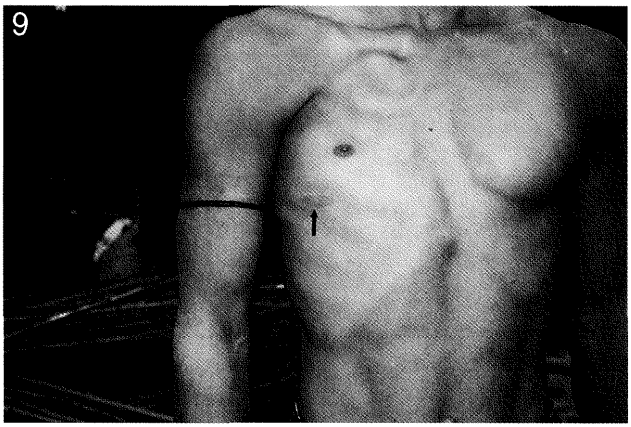


Fig. 9. Complete absence of the major muscle on the right side of NS's chest. Arrow indicates area of increased pigmentation in right chest.

(Figure 9). The murderers then threw Mulayam's body into an irrigation canal. NS included this detail as the last memory of the previous life.

Relevant behavior of NS. In early childhood NS had a fear of being immersed in water. This lasted until he was 14 to 15 years old. In childhood NS used to steal food from his family, and he stole money from his father at least once. He stopped stealing when he was about 12 years old. The other five children of the family did not steal. NS spoke of revenging himself on the murderers of Mulayam until he was 8 to 10 years old.

Independent information about Mulayam. We learned some details about Mulayam from informants other than NS. Mulayam used to pass through NS's village on his way to Etah, the District Town. NS's grandfather knew him as a miscreant and warned his children to stay away from him. NS recognized at least two persons of Millawali who passed by his house. That is, he recognized them as persons known to Mulayam. Also, some members of Mulayam's family came to visit NS and accepted his claim to be Mulayam reborn. NS's mother said some members of Mulayam's family wished to adopt him, but NS's family had refused this proposal. The headman of Millawali remembered Mulayam's death as having occurred in about 1987–88. (This must be inaccurate, as Indian villagers sometimes are about dates.) He had heard NS, when a child, speaking about the life of Mulayam, and he told us that whatever he (NS) said about Mulayam was "correctly told."

NS's birth defect and birthmark. Figure 9 shows that NS had a complete absence of the principal muscle (pectoralis major) on the right side of his chest. His right arm and hand were otherwise normal. No other member of the family had a similar defect. The area of increased pigmentation in the right chest is at the site where, according to NS, Mulayam was shot by one of his murderers.

Comment. Absence of the major muscle on the front of the chest is usually

accompanied by decreased development of the arm (often with webbing of the fingers) of the affected side. The combination is then described as Poland Sequence, so named after the physician who first described it (Poland, 1841). A genetic factor has been implicated in a few cases (Smith, 1982) but Flatt (1977) found no evidence of familial incidence in a series of 43 patients. We have not learned of evidence or conjectures suggesting other causative factors.

Smith (1982) estimated the incidence of the full Poland Sequence as 1 in 20,000. We have not found any figures for the incidence of unilateral absence of the major chest muscle without other congenital anomalies, such as underdevelopment of the arm on the affected side.

As mentioned, our independent evidence about the previous life that NS claimed to have lived consists of knowledge that a man called Mulayam of Millawali village existed, was known to be a miscreant, and was said to have "disappeared." We have no direct evidence that Mulayam had his chest broken and was shot in the chest before he died. The suggestion of a correspondence between wounds on Mulayam and NS's congenital abnormalities derives therefore from NS's claim to remember how Mulayam was killed.

The Case of AD

AD was born in a village of the province of Hatay, Turkey, in October 1974. His parents were Alevis, an Islamic sect of the Shiite branch with many adherents in southcentral Turkey. They believe in reincarnation. His mother's pregnancy with him was normal and uneventful. He was born with a complete absence of the left hand (Figure 10). The end of the arm was not bleeding. He also had two birthmarks on his head.

When AD was about 1½ to 2 years old, he began talking about a previous life. His statements included a description of how in the previous life he had worked in a factory building that had collapsed during a heavy storm. A piece of the falling building had hit his left hand before another piece of the building also fell down and killed him. AD said that he remembered the name, Salih, that he had had in the previous life. This and other details he narrated corresponded to events in the life and death of a young man called Salih Girişken, who had lived in another village some 20 km away from AD's village. The two families were not related and had no acquaintance before the case developed.

AD's parents subscribed to a local belief that children who seem to remember previous lives die young. Accordingly, they applied a standard remedy for such memories and spat into his mouth. This was ineffective, as all such measures seem to be (Stevenson & Chadha, 1990).

The investigation of the case. J.K. learned of this case in 1992. He investigated it in 1992 and 1994. He interviewed AD, AD's parents, Salih Girişken's mother, two of his brothers, and a fellow worker of Salih at the factory where Salih was killed.

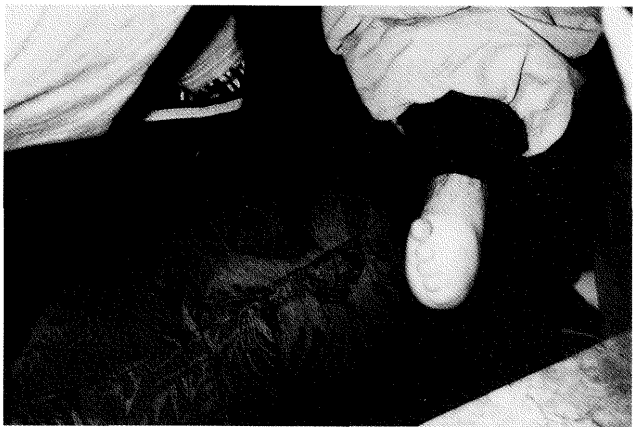


Fig. 10. AD's left forearm with nubbins at the end of the stump

The absence of AD's hand embarrassed him greatly, and much of the time he kept his left forearm covered. Initially, he participated in examinations reluctantly, but became more forthcoming after J.K. assisted him in obtaining a prosthesis.

The collapse of the factory in which Salih died was attributed to the storm and no official inquiry about its occurrence seems to have been made. There was no postmortem examination of Salih's body.

Statements made by AD. AD made the following statements when he was a young child. He did not necessarily make them in the order in which J.K.'s informants remembered them. He said his name was Salih, not A; and he asked not to be called A. He said he was engaged to a girl called Vahide. He said he had a red bicycle, which was left at the factory where he worked. With one exception these details were all correct; the item about the red bicycle was unverified.

AD also described how he had died in the previous life: A metal roof had fallen on him and cut off his left hand. The metal also crashed on his head and he died. This account was substantially correct, although J.K. did not learn precise details about injuries to Salih's left arm.

Meetings between the families concerned Among the Alevis (and some other groups having a belief in reincarnation) dreams sometimes are thought to communicate where a deceased person will be reborn or has been reborn. Such a dream brought Salih's mother to AD's village in search of a newborn baby who might, she supposed. later speak about Salih's life. She met AD's parents, but no useful information developed from this meeting. At this time AD had not begun to speak, and his parents did not even show him to Salih's mother. Subsequently, however, and probably as a delayed result of this initial meeting, two of Salih's brothers came to visit him. Again, little information was exchanged. Still later, when AD was in school, one of Salih's brothers came to see him at the school. At that meeting AD mentioned the details of the previous life he had already stated

to his family and, in addition, gave the name of the village where Salih had lived. From the evidence of J.K.'s informants it seems probable that AD's information about Salih did not come from his family's contacts with Salih's family.

Independent information about Salih's death. As mentioned, no postmortem examination was made on Salih's body. When the factory seemed about to collapse most of the workers escaped from the building. Salih and one or two others remained behind. After unsuccessfully pursuing three leads to possible witnesses of the accident, J.K. was able to find and interview one, Yusuf Yesiloğlu, who had saved himself by standing next to an upright beam that did not break when the roof collapsed. He said that metal girders supporting the roof came down. One crashed on Salih's head and one or two on his arm and leg. He could not be certain whether it fell on the right or left arm and leg. On this point Salih's mother furnished a relevant detail. She said that she saw Salih's body when it was being buried. She kissed his right hand and in doing so observed that his left wrist and fingers were dark blue.

Salih died in 1974; J.K. did not learn a more precise date.

AD's birth defect and birthmarks. Figure 10 shows the marked shortening of AD's left forearm with nubbins evident at the end of the stump. In medical terms this is a terminal partial transverse hemimelia. Birch-Jensen (1949) found this anomaly in 1 of 25,000 births in the Danish population he surveyed. Of the birthmarks on the head that AD's parents said he had, J.K. found only a small residue of one on the forehead that would not be adequately visible in a photograph. AD's parents were not aware that he had any other congenital abnormalities. His general health was good.

Comment. Although this case was investigated some 15 years after its development, we do not believe this fact discredits the evidence about it that J.K. obtained. In long-term follow-ups of these cases we have found that informants do not embellish their testimony about them with the passage of years. On the contrary, details are often lost from their memories (Stevenson & Keil, 2000).

The Case of DG

DG is an American boy who was born in 1997 with narrowing of the pulmonary artery at the site of the valves (pulmonary valve atresia). His mother reported no infections during her pregnancy that could account for this anomaly, which occurs once in every 70,000 births (Keith et al., 1967). There was no family history of congenital heart defects. Although his parents were Christian, his mother attended a nondenominational church and was open to the concept of reincarnation. DG's birth defect was very similar to the fatal wound suffered by his maternal grandfather (LS) in a shooting. In addition, when DG became old enough to talk, he made a number of statements that indicated knowledge about his grandfather's life that his mother thought he could not have obtained through normal means.

The investigation of the case. J.T. interviewed DG's mother twice regarding

the case, once in December 2001 and again in April 2002. In addition, DG's medical records and his grandfather's autopsy report were reviewed and parts were copied.

Statements made by DG. When DG was 3 years old, he persisted in misbehaving one day at home. Finally his mother told him, "Sit down, or I'm going to spank you." DG replied, "Mom, when you were a little girl and I was your daddy, you were bad a lot of times, and I never hit you!" He later talked about being his grandfather a number of times and discussed his death. He said that several people were shooting during the incident when he was killed, and he asked questions about it a number of times.

DG also talked about other facets of his grandfather's life. He correctly described the two cats that his family owned and even stated the nickname that his grandfather had given one of them. He also gave the correct day of the week of his grandfather's death.

In addition, he accurately described his mother's tendency to hold her abdomen during her pregnancy with him as she ran up the steps of the family's previous home. When she asked him how he knew that she had done that, he said that he had been watching her.

The life and death of LS. LS spent most of his adult life working as a police sergeant. He eventually retired due to an injury, but he later worked as a security officer at a bank. Following work one day in 1992, he went into a store and discovered that a robbery was taking place. He pulled his revolver on an assailant at the cash register but was unaware of others behind a counter. They began shooting at him, and he was hit six times.

An autopsy report stated the following about the fatal shot:

> Gunshot wound [track] is going through the skin, underlying soft tissue, penetrating to the chest between 10th and 11th posterior left ribs, lacerated lower and upper lobe of the left lung, perforating pericardial [sac] and lacerated the left auricle and main pulmonary artery, proceeding through the pericardial sac, through the mediastinum, through the sternum... There is 4-1/2 cm lacerated wound of the left ventricle. There is a 4 cm lacerated wound of the main pulmonary artery.

DG's birth defects. DG was noted to be cyanotic immediately after his birth, and a cardiac evaluation was performed. A cardiac catheterization at 1 day of age revealed the following diagnoses:

1. Pulmonary valve atresia with intact ventricular septum. [Narrowing of the pulmonary artery at the site of valves]
2. Hypoplastic right ventricle, severe. [Poor development of the right side of the heart]
3. Nonrestrictive interatrial septal defect. [Hole in the part of the heart separating the auricles]
4. Small right ventricle to coronary artery communications without evidence of coronary artery stenosis or right ventricular dependence. [Poor development of right side of the heart; no obstruction of coronary artery]

5. Large patent ductus arteriosus. [Normally closed channel still open]

DG underwent a shunt, the first of several procedures, and he has done quite well with no current lifestyle restrictions.

Comment. The narrowing of DG's pulmonary artery was a close match with the wound to LS's pulmonary artery. DG's undeveloped right ventricle was secondary to the narrowing of the pulmonary artery. DG did not have a defect that precisely matched his grandfather's left ventricle wound. His case demonstrates that cases with birth defects can occur in the United States that are similar to the ones occurring in many Asian cultures where there is a predominant belief in reincarnation. Previous American cases have been noted before (Stevenson, 1983) but these involved only statements by children about previous lives and did not include any birthmarks or birth defects that corresponded to wounds suffered in that life.

A case exactly like DG's could not have developed in the Asian villages where many of the others have occurred because a child with severe congenital heart disease would die in infancy before being able to make statements about a previous life. Nonetheless, some Asian cases have included significant internal defects without the skin being involved (Stevenson, 1997 pp. 1655–1721) even though such cases are not nearly as common as ones where visible birthmarks or birth defects are thought to be associated with injuries in a past life.

Discussion of Part II

We believe we are warranted in describing as "unusual" the birth defects in the four cases reported here. In using this term we refer to the known or estimated incidence of such defects. The cases are additionally unusual in the informants' claims that the birth defects correspond to wounds in specified previous lives. The evidence for this claim is admittedly meager in two cases. Indeed, for these cases (those of IA and NS) we obtained no direct evidence of such correspondences. It may seem probable to many readers that we failed to learn about one of the recognized causes of birth defects. Perhaps the subject's mother had a little-noticed and soon-forgotten viral infection during her pregnancy with the subject; or during the pregnancy she might have taken some local "natural" medication that could cause birth defects, or, in medical terms, was teratogenic.

Nevertheless, we believe that we did obtain some indirect evidence of a relevance of the birth defects to the implicated wounds. This comes from the evidence that each of the subjects showed knowledge of events in the life of a deceased person that we believe they did not obtain normally. Their demonstration of such knowledge about events unrelated to the death in the previous life gives some warrant for crediting the subjects' statements about how these deaths occurred.

Regardless of whether or not the birth defects were connected to the wounds on deceased persons, the children's beliefs that they were are important to note.

As the case of DG demonstrates, such beliefs can occur in Western families as well as in Asian ones.

Note

[1] In this report we have designated the subjects of the cases and other informants by initials without punctuation, e.g., AL. We have designated the investigators also by initials, but with punctuation, e.g., S.K.P.

Acknowledgement

The research of the Division of Personality Studies is supported by the Azuma Nagamasa Memorial Fund, the Japan-US Fund for Health Sciences, the Society for Psychical Research, the Perrott-Warrick Fund, Richard Adams, and several anonymous donors. We are grateful to Dr. Barbara Wilson of the Department of Dermatology, University of Virginia Health System, for reading Part I of this paper and providing helpful comments. We also thank Dr. Emily Kelly and Patricia Estes for helpful comments on drafts of this paper.

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