

What kind of twins were Jacob and Esau?

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Only two cases of multiple birth are recorded in the Bible. Both appear in Genesis — the twin sons of Isaac and Rebekah (25: 24 - 26) and the twin sons of Tamar (38: 27 - 30). It is likely that the phenomenon of multiple birth was as common (or uncommon) then as it is now, the incidence of twins today being once in every 80 pregnancies, with dizygotic twins occurring three times more frequently than monozygotic twins.¹ The Bible probably only refers to these two particular cases of twin deliveries because they were exceptional: the first delivery involved newborn boys with a peculiar appearance, and the second involved an unusual birth sequence.

This paper deals with the first set of twins, Esau and Jacob, the sons of the patriarch Isaac and his wife Rebekah, and puts forward an answer to the question: what kind of twins were they? This question has never been adequately answered before, as the biblical text provides us with details that have not been reconciled in a satisfactory manner.

The Bible record is as follows:

'And Isaac was forty years old when he took Rebekah to wife . . . And Isaac intreated the Lord for his wife, because she was barren: and the Lord was intreated of him, and Rebekah his wife conceived. And the children struggled together within her; and she said, If it be so, why am I thus? And she went to enquire of the Lord. And the Lord said unto her, Two nations are in thy womb, and two manner of people shall be separated from thy bowels . . .

And when her days to be delivered were fulfilled, behold, there were twins in her womb. And the first came out red, all over like a hairy garment: and they called his name Esau. And after that came his brother out, and his hand took hold on Esau's heel; and his name was called Jacob; and Isaac was threescore years old when she bare them.' (Genesis 25: 20 - 26.)

Conception was delayed; Isaac married Rebekah when he was 40 and the twins were born when he was 60. The reasons for it are not recorded.² The diagnosis of a twin pregnancy had already been established; it was known by the mother during the pregnancy, and she evidently suffered discomfort in carrying the twins.

The most striking detail in the record of this birth is the peculiar appearance of one twin: 'And the first came out red all over like a hairy garment' (Genesis: 25: 25). This description refers only to Esau and seems to indicate that the twins were not identical, although some scholars have suggested that they were dizygotic twins.³⁻⁵

However, as dizygotic twins have individual amniotic sacs,

it would not be possible for such twins to emerge holding on to each other: 'and after that came his brother out, and his hand took hold on Esau's heel, and his name was called Jacob' (Genesis 25: 26). (The meaning of the name Jacob is 'he who follows on the heel'.) Their emergence from the womb 'together' suggests that they shared the amniotic sac and were therefore monozygotic.

Indications that Jacob and Esau were dizygotic twins

Dizygotic twins originate from two different fertilised eggs and develop *in utero* in two different amniotic sacs, each of which possesses its own separate placenta and chorion. They are non-identical, can be of different sexes and can be as dissimilar as any two siblings.

The physical description of Esau and Jacob at birth seems to indicate that they were dizygotic twins. However, if they were not monozygotic, the observation of 'his hand took hold on Esau's heel' would require an explanation. Levin³ maintains that it can be assumed that during the process of Esau's birth, Jacob's amniotic sac was ruptured. This assumption had already been made by the biblical commentator, Abraham Ibn Ezra, in the 12th century, though he added cautiously that this was 'a most unusual occurrence' (Ibn Ezra's commentary on Genesis 25: 25). Preuss⁶ suggested that the expression 'to hold unto the heel' is figurative and not intended to be read literally, as in Genesis 27: 36 and Jeremiah 9: 3. Preuss feels that it is unlikely that they were identical twins because Esau was described as looking different. Preuss believes that Esau's hairiness is an indication of marked hypertrichosis, and he goes on to note that red hair was uncommon in Canaan at the time. (It is unclear what prompted Preuss to comment thus on the colour of Esau's hair.) The reference to Esau's hairy skin is reinforced later, in Genesis 27: 11. In this episode, Jacob covers his smooth neck and arms with goatskins in order to fool his sight-impaired father into believing that he is Esau.

Although there is much controversy about the nature/nurture theories of personality development, the marked difference in the brothers' personalities could be used to support the hypothesis that Jacob and Esau were not monozygotic twins. These differences are clearly seen in Genesis 25: 27:

'And the boys grew: and Esau was a cunning hunter, a man of the field; and Jacob was a plain man, dwelling in tents.'

When he grew older, Jacob was able to plan ahead and handle delayed gratification, unlike Esau who wanted immediate physical satisfaction. Esau could not make long-term plans, and could not comprehend abstract concepts or perceive their benefits, as is evident in Genesis 25: 29 - 32:

'And Jacob sod pottage, and Esau came from the field, and he was faint: And Esau said to Jacob, Feed me, I pray thee, with that same red pottage; for I am faint . . .

And Jacob said, Sell me this day thy birthright. And Esau said, Behold, I am at the point to die: and what profit shall this birthright do to me?'

From this one can see clearly that the twins had markedly different personalities.

Indications that they were monozygotic twins

Monozygotic twins develop from one fertilised egg which splits in two, forming two genetically identical infants who may share the same placenta, chorion and amniotic sac, are of the same sex, and look identical, although they may have different birth weights.

What is the evidence that Esau and Jacob were monozygotic twins? Preuss, although favouring the dizygotic explanation, has said that it is possible that they might have been monozygotic twins because, if they had originated from a single egg, they might have been born from a single ovum with a common chorion; this would explain the fact that they were born 'together', one holding on to his brother's heel.

When identical twins share the same amniotic sac, the cramped quarters which they occupy *in utero* can result in their being born with entangled cords or an interrupted blood flow. If Esau and Jacob were identical twins who had shared the same amniotic sac, this might explain the unusual circumstances under which the second baby emerged holding on to the first baby's heel. In other words, one can read the words 'holding on to his brother's heel' literally and not merely as a poetic expression.

However, if this were the case, one has the problem of interpreting the difference in appearance and personality between two 'identical' brothers.

The personality differences in the twins could be attributed to developmental and environmental, not genetic, differences. But the physical differences pose a bigger problem to scholars who suggest that Esau and Jacob are monozygotic twins.

This paper proposes that Esau and Jacob were indeed monozygotic twins whose differences were a result of twin-twin transfusion syndrome, a condition in which identical twins who share an amniotic sac have an abnormal blood circulation. In normal twins, each fetus draws oxygenated blood from the mother, and expels his/her deoxygenated blood separately back into the mother's bloodstream. In transfusion syndrome, connections between the circulation of the twins are detected. The artery from one fetus distributes blood into a placental cotyledon which, in turn, is drained by the vein of the next fetus. As a result the one twin is born with too many red blood cells, and may suffer from hypertension and an enlarged heart, while the other twin will have hypotension, and be anaemic and dehydrated.⁷

There can be as much as 5 g/dl haemoglobin and 20% body weight difference between the twins.⁸ The recipient twin is bigger and redder at birth, may be of somewhat lower intelligence,⁹ and may display more aggressive traits (Professor Clive van der Elst — personal communication); this fits the biblical description of Esau. The second twin is usually smaller and paler, which fits the biblical description of Jacob.

Conclusion

Physically, Esau was the 'red and hairy' first-born twin who grew up to be an able hunter, an impatient man who could

not delay gratification and could not plan ahead. He is described as quick tempered and ready to kill when he felt betrayed. Jacob on the other hand is described as a 'man who dwelt in tents'.

The hunting skills of Esau were appreciated by their ailing father, Isaac. Their mother favoured the calculating, younger twin, Jacob. This may indicate that there was a closer bond between them because Jacob had been a weak and anaemic baby.⁹ This parental respective affinity could have accentuated the dissimilarity between the twins, as well as their perception of themselves and of their relationship with each other; this would have been picked up by readers.¹⁰

However, after a hostile relationship and obvious differences in their youth, they experienced a long separation. During these maturing years they grew more similar in their personalities, in their aspirations and in their actions: both married, had many offspring and fulfilled themselves. Their reunion, which was anticipated with anxiety, is described as a warm meeting between long-lost brothers.

'And Esau ran to meet him [Jacob] and embraced him and fell on his neck and kissed him and they wept: . . . And Jacob said, Nay, I pray thee, if now I have found grace in thy sight, then receive my present at my hand for therefore I have seen thy face, as though I had seen the face of God and thou wast pleased with me.'
(Genesis 33: 4, 10.)

It has been observed that the visible dissimilarity of twins born with transfusion syndrome diminishes as they mature and their similar features become more conspicuous with the passing years.¹¹

Therefore not only do all records of Esau and Jacob in birth and childhood indicate the symptoms of twins who were born with transfusion syndrome, but their behaviour as adults reinforces this theory.

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