

Osteopathic Treatment of a Malformation, Subluxation Calcanei of 170°, of the Foot of a New-Born

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Abstract

Case report about a new-born with a subluxation calcanei of 170-180° after birth, a severe form of the pes calcaneus. The right fibulae were shifted caudally and bent the talus and the calcaneus into inversion. The forefoot was lying against the shin. The neonatologist wanted the right foot to be plastered. At the osteopathic treatment the mobility of the pedal bones was very good and the baby loved his foot being mobilized. So the parents didn't agree the neonatologist and wanted to wait for another week, they claimed Pascal having been born a week prematurely. Within 14 days after delivery Pascal was treated osteopathically in short times and no more restrictions in the right foot could be found.

Keywords: Malformation; Kane foot; New-born; Subluxation calcanei; Osteopathic treatment; Position of the fibula; Pascal

Introduction

A new-born baby with a malformation, a subluxatio calcanei of 170 - 180°, was treated with Osteopathy immediately after birth. The forefoot was lying against the shin. Since mobility of the pedal bones was very good the parents and the neonatologist decided to treat the boy in short periods with Osteopathy. After 4 treatments the calcaneus, the talus, both fibulae were in their right positions and also the fascial drag of the legs were resolved.

It is shown that a baby's foot is able to cope with such a big malformation and actually get rid of it.

Pascal was born on November 5th. It was a fast delivery after 39 weeks of pregnancy. As I was present during his birth I could examine him immediately thereafter.

He was a vital and healthy new-born weighing 3200 g and 50 cm tall. The Apgar Score was 09/10/10. His skin was rosy tinted and he had a wonderful first cry. His movements were strong and also his muscle tonicity. His cranial rhythm and the movements of the SSB were good and showed a light torsion to right, extension lesion, tensions at the occiput and temporale on his right side with slightly tensions of the meanings. In the visceral system I found a tension in the right diaphragm [1-3].

Most strikingly I found a subluxatio calcanei of 170°-180° on his right foot. Both fibulae were shifted caudally, the right one two centimetres. Two centimetres does not sound very much, but for a foot so small it is quite big a figure. The fibula had bent the talus and the calcaneus into inversion, the result of which being a subluxation. The forefoot was lying against the shin. The neonatologist called for assistance wanted to put the leg in plaster.

I treated his right foot and mobilized all the little bones, especially the fibula, the tibia and the calcaneus and all the neighbouring metatarsal bones. There was also a fascial drag of the right leg to the hip and the right pelvis, with an inward rotation. Because of his very good vitality the treatment of the fascia was very fast and the pelvis and the axis of his right leg went into the correct position [4-9].

Since mobility of the pedal bones was very good and Pascal loved having his foot mobilized, the parents, the doctor and I

decided to wait for another week. Had Pascal not been born prematurely he would have spent another week in the womb in this crooked position, anyway.

I made an appointment with the parents to see the baby the day after, as I wanted to mobilize the foot again. The neonatologist agreed, however, was very skeptical regarding my treatment of Pascal, due to the degree of malposition.

I checked all the orthopedic books on subluxatio calcanei and severe kane foot [10-17] and called up some well-known osteopaths I know, but I could not find any help or any kind of advice for my osteopathic approach [5,6] (Figures 1 and 2).

When I saw the foot the next day the right fibula had already moved back cranially one centimetre, so that the foot only showed a dorsal flexion, the forefoot no longer touching the tibia. A kind of ankle has already developed. Above the talus I spotted an increased tension of the fascia. The tonus of the muscles in the legs is less. I work on the ileae and the hips and the feet. As Pascal liked to get mobilized I treated all the bones of the foot. The calcaneus was rotated back about 90 degrees and I worked again on the position of the fibula. All the ligaments around the calcaneus and talus and also the intraosseus membrane between tibia and fibula were balanced with balanced ligamentous techniques and the fascia of the forefoot were harmonized.

In the course of the next week I saw Pascal every second day. At our third appointment I could only feel the ligamentous tension between the talus and calcaneus and the movement of the fibula against the tibia. Pascal is a little bit yellow and so I do some work on the liver, I feel tensions in the posterior liver and the diaphragm. He suckles very well. But hardly anything was

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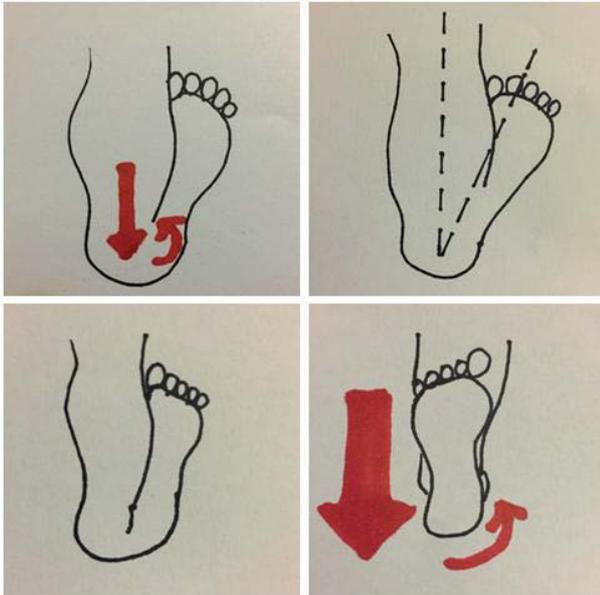


Figure 1: Lateral and ventral view of Pascal.



Figure 2: The feet of Pascal now after 7 months.

seen of the formerly (serious) big malformation of the foot.

A week after birth the deviation of the right foot was no longer visible, although tensions at the talus and calcaneus were still to be detected on palpation.

Another appointment was scheduled for 3 weeks after birth. During that period the parents had consulted an orthopaedic doctor, who, without being told, could not spot anything out of the normal. Only when the parents told him about the problems they had encountered, he said he had better see the baby again after three weeks.

At my subsequent osteopathic treatment of Pascal I only found an anterior talus which I repositioned; calcaneus and fibula were in the right position.

After three months no more restrictions in right foot could be found. All of us, the neonatologist, the orthopaedic doctor and I were really amazed that this rather strong malposition of the ankle was resolved by osteopathic treatment alone in such a short time.

It is a pity that there were no pictures taken immediately after birth showing Pascal's subluxatio calcanei.

I greatly appreciated that Pascal's parents trusted me and my

work that much; naturally they were pleased that their son's leg did not need have to be put in a cast.

Discussion

The pes calcaneus is an often seen malformation of the newborn, where the foot goes into dorsiflexion, or extension. [15,16]. In a severe subluxation calcanei the forefoot lays at the shin and the child can't put the foot on the floor. So it can just go on its heel and also can't stand on his toes. If it is not so severe the child has its weight on the heel and the forces goes to the knees, hips and pelvis, where it causes pain [17]. The pes calcaneus can be congenital right after the birth, it can be genetic or due to the position of the baby in a forced intrauterine posture. But it can also develop later caused by trauma or an imbalance of the muscular function of the feet, where the muscle extensors are stronger than the flectors.

Another reason could be a paralysis of muscles of the calf [13,15].

The kane feet which you find in new-borns is described in literature as a result of the intrauterine position of the baby and the maternal pelvis and abdomen [13,16]. The treatment is mobilizing the feet by physiotherapy [15,18,19]. In severe cases like this one above of Pascal a plaster is needed and sometimes an operation is necessary. If a severe pes calcaneus is not treated well the child can develop bursitis and an atrophy of the nervus tibialis [15,16].

For the osteopath the question arises weather a caudal fibula is the fixing point of the pes calcaneus or any other congenital idiopathic malformations of the foot. The fibula is such a little bone on the outside of the leg and very often the foetus lays on one side in the uterus, so that the little feet are moving in the ribcage of the mother [12-14]. Very often you hear complaints from the pregnant women that they have pain on the right side at the lower ribs because of the movements of the baby. When you imagine the position of the baby just before delivery when the space is getting narrow and there are some contractions coming from the fundus to the cervix with all the big muscles of the uterus exerting their forces also to the small fibula - it is a good reason to look at the position of both fibulae of every new-born. Often we find asymmetry with one fibula being more caudal or cranial than the other [13,14]. By treating these little differences you could help the babies to develop equal feet without suffering from sickle or kane feet. It is worthwhile to have special attention of this aspect after birth.

Conclusion

As an osteopath we can protect kids of many lesions of the spine and the legs, which they developed when they start walking, if we look at the whole anatomy of their feet as new-borns.

For me it was the beginning to start looking very carefully at the position of the ankles of new-borns.

Of course Pascal has still his check-ups at the paediatrist and the orthopedic doctor but his development of his movements are just normal.

It was quite a nice experience to feel how a baby's foot is able to cope with such a big malformation and how flexible the bones are at newborns.

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