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Mordechai Kamel, MD

[redacted]

Diplomate, American Board of Orthopaedic Surgeons

Diplomate and Senior Disability Analyst, American Board of Disability Analysts

[redacted]

Attorney [redacted]

Re: [redacted]
Date of Injury: [redacted]

Dear Attorney [redacted]:

I have reviewed the medical record on the above named at your request. Records reviewed included hospital records of [redacted] Hospital [redacted] – [redacted] including operative record of [redacted], MD [redacted], records of [redacted] Hospital [redacted] – [redacted] including operative record of [redacted], MD [redacted], office records of [redacted] Orthopedics, Inc initialed [redacted], [redacted], [redacted], [redacted], [redacted] and [redacted], records of [redacted] physical therapy [redacted] – [redacted], office records of [redacted], MD [redacted], [redacted], [redacted] and [redacted], records of [redacted] Medical Center [redacted] – [redacted] including operative record of [redacted], MD [redacted] and record of [redacted], MD [redacted]. Also reviewed were elbow x-rays dated [redacted], [redacted], [redacted], [redacted] and [redacted].

Films of [redacted] demonstrate that radial head and neck fragment are displaced somewhat anteriorly (forward) and that in oblique view there is bending of the pin, while in the lateral view the insertion point of the pin is very close to the epiphysis (growth plate) of the distal (lower end of the) humerus. Films of [redacted] demonstrate that radial head and neck fragment are displaced anteriorly (forward) radially (towards the thumb) and that the pin is fractured at the articular (joint) surface of the capitellum (thumb side of the distal humerus). There is callus formation anteriorly consistent with early healing of the fracture and the capitellar epiphysis seems to be open. Films of [redacted] demonstrate that radial head and neck fragment remain displaced anteriorly and radially and that the interosseos portion of the pin remains in the radius but has been advanced out of the joint. There is more callus formation anteriorly and there appears to be some fluffy calcification between the radius and the ulna.

Films of [redacted] are similar to those of [redacted] although I am no longer able to define the capitellar epiphysis. Films of [redacted] demonstrate significant osteoporosis about the distal humerus and apparent roughness of the articular surface of the capitellum and apparent closure of the capitellar epiphysis as well as the other findings of previous films.

Based on a reasonable degree of medical certainty, diagnosis is:

1. Fracture of the proximal radius status post open reduction with failure of hardware.
2. Elbow stiffness secondary to diagnosis 1, status post capsulectomy.

There are several factors that need to be considered in this case which has resulted in such a poor result for this child.

1. Approximately one-half of children who sustain fractures of the radial neck will have some permanent limitation of forearm rotation. Results are poorer in children older than 10 years of age, after open reduction, and when the initial angulation was greater than 30 degrees or the displacement was greater than 3 mm[1,2,3]. All of these negative prognostic factors pertain to this case.

2. Errors or deficiencies of medical care by the treating orthopaedist.

With regard to complications of the injury itself, i.e. number 1 above, the only comment that one can make is that the majority of these cases have minor limitation of forearm rotation requiring no treatment, and it is only rare that further surgery needs to be performed. It is exceedingly rare that in a well reduced fracture that there be significant limitation of flexion and extension that require any further treatment beyond physical therapy.

With regard to errors or deficiencies of medical care, there is certainly evidence in the record of at least several.

- I did not have access to the intraoperative fluoroscopy films, but clearly [redacted] films in cast demonstrate that radial head and neck fragment are displaced somewhat anteriorly and that in oblique view there

[1] Evans M, Graham H. Radial neck fracture in children: a management algorithm. J Pediatr Orthop Br 1999;8:93.

[2] Fowles J, Kassab M. Observations concerning radial neck fractures in children. J Pediatr Orthop 1986;6:51.

[3] Tibone J, Stoltz M. Fractures of the radial head and neck in children. J Bone Joint Surg Am 1981;63:100.

is bending of the pin. There is no documentation that the treating physician reviewed these films in the office or that he was aware of the situation which should have been worrisome. This situation would be even more worrisome if intraoperative radiographs demonstrated a better reduction and no bending of the pin. It would certainly be valuable to review the missing radiographs as this would clarify this and several other questions.

- There is no mention in the operative record of [redacted] as to whether or not the radial head was still held by the orbicular ligament or not. This is a critical point, because if the radial head is outside of an intact orbicular ligament, the ligament must be divided and repaired as the displaced orbicular ligament will prevent perfect stable reduction and significantly contribute to loss of forearm rotation. If, in fact, intraoperative radiographs demonstrated an excellent reduction, then one can conclude retrospectively that the radial head was still held by the orbicular ligament, however if the reduction was no better than that seen on [redacted] films, then it is possible that the orbicular ligament remained displaced between the radius and ulna with all of the negative prognostic implications inherent to that situation.

- It is recognized that placement of a pin through the capitellum, across the radial head, and into the radial neck should be avoided because the complications from this fixation are high[4,5]. It has been generally accepted practice in the pediatric orthopaedic community for almost 20 years that this method of fixation should be avoided because of the high incidence of pin breakage and the unacceptable complication of iatrogenic interference with the growth plate of the distal humerus. Dr. [redacted] does mention in his reading of the [redacted] films that there is both a synostosis of the radius and the ulna as well as "what appears to be a growth arrest ……. at the medial aspect of the distal humeral condyle". These films were not available for my review, but if correct, the growth arrest is caused directly by the less than ideal choice of fixation of the fracture.

In conclusion, I believe that there is evidence in the records reviewed that Dr. [redacted] failed to treat this patient with the degree of skill and learning

[4] Wedge JH, Robertson DE. Displaced fractures of the neck of the radius in children. J Bone Joint Surg [Br] 1982;64:256.

[5] Fowles JV, Kassab MT. Observations concerning radial neck fractures in children. J Pediatr Orthop 1986;6:51.

ordinarily exercised by an orthopaedic surgeon with experience in treating fractures of the proximal radius in a child.

Hoping this information meets your needs. Contact me if you require clarification on any of the points.

Sincerely

MK/msw

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Diplomate and Senior Disability Analyst, American Board of Disability Analysts

[redacted]

[redacted]

Re: [redacted]
Date of Injury: [redacted]

Dear Attorney [redacted]:

I have reviewed the copies of the intraoperative radiography regarding the above named at your request. The films consist of two sets, both are labeled [redacted], one set is dated [redacted] and document five intraoperative views of the elbow taken between 8:37 and 8:41, the second set is dated [redacted] and documents two views of the elbow taken between 11:03 and 11:28.

Films of [redacted] demonstrate that reduction is not perfect and that the radial head and neck fragment are displaced somewhat anteriorly (forward). The position of the proximal fragment noted on these films allows for the possibility that the radial head is outside of the intact orbicular ligament. Although this minor degree of displacement is not proof that the radial head is outside the orbicular ligament, coupled with the absence of any mention of the orbicular ligament in the operative report, it is possible that the orbicular ligament remained displaced between the radius and ulna with all of the negative prognostic implications referred to in my previous letter.

In conclusion, I believe that the intraoperative x-rays reinforce the evidence in the records previously reviewed that Dr. [redacted] failed to treat this patient with the degree of skill and learning ordinarily exercised by an orthopaedic surgeon with experience in treating fractures of the proximal radius in a child.

Hoping this information meets your needs. Contact me if you require clarification on any of the points.

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Mk/msw

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Diplomate and Senior Disability Analyst, American Board of Disability Analysts

[redacted]

[redacted]

Re: [redacted]
Date of Injury: [redacted]

Dear Attorney [redacted]:

I have reviewed the copies of the elbow x-rays taken in Dr. [redacted] office, presumably taken on [redacted], regarding the above named at your request. The films consist of three views of the right elbow. They demonstrate that the distal humeral epiphysis is closed, as described by Dr. [redacted] in his letter, and that there is organized bone formation coming off of the proximal medial ulna and which appears to extend onto the anterior surface of the radius. This would support Dr. [redacted] statement in the record that there was a "synostosis of the radius and the ulna." Of note is also the possibility that the organized bone formation ***could*** represent ossification of a displaced orbicular ligament. These films do not prove that the ligament was displaced, but, as we have no documentation in either the record or the x-rays that it was not, they certainly seem to support that thesis.

In conclusion, I believe that these x-rays also reinforce the evidence in the records previously reviewed that Dr. [redacted] failed to treat this patient with the degree of skill and learning ordinarily exercised by an orthopaedic surgeon with experience in treating fractures of the proximal radius in a child.

Hoping this information meets your needs. Contact me if you require clarification on any of the points.

Sincerely

MK/msw