

Notice of Independent Review Decision

PEER REVIEWER FINAL REPORT

DATE OF REVIEW: 4/30/2010

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

Right Elbow Extensor Origin Repair and Acutaneous Muscle Transfer

QUALIFICATIONS OF THE REVIEWER:

Orthopaedics, Surgery Trauma

REVIEW OUTCOME:

Upon independent review the reviewer finds that the previous adverse determination/adverse determinations should be:

- Upheld (Agree)
 Overturned (Disagree)
 Partially Overturned (Agree in part/Disagree in part)

Right Elbow Extensor Origin Repair and Acutaneous Muscle Transfer Upheld

INFORMATION PROVIDED TO THE IRO FOR REVIEW

1. Case assignment by, dated 4/12/2010
 2. Independent review organization by Author unknown, dated 4/12/2010
 3. Review organization by Author unknown, dated 4/9/2010
 4. Fax page dated 4/9/2010
 5. Letter by, dated 4/9/2010
 6. Outpatient reconsideration by, dated 3/25/2010
 7. Outpatient non authorization recommendation by, dated 3/9/2010
 8. Clinical note by Author unknown, dated unknown
 9. Clinical note by author unknown dated 04/14/2010
 10. Clinical note by Author unknown, dated 4/14/2010
 11. Clinical note dated 4/14/2010
 12. E-bill image by author unknown, dated 4/14/2010
 13. E-bill image by author unknown, dated 4/14/2010
 14. IRO request form dated 4/12/2010
 15. Notice to air analyses by, dated 4/12/2010
 16. Letter by, dated 4/9/2010
 17. Outpatient reconsideration decision dated 3/25/2010
 18. Letter by MD, dated 3/23/2010
 19. Texas outpatient non-authorization dated 3/9/2010
 20. Utilization review referral dated 2/25/2010
 21. Letter by D.C, dated 12/08/2009
 22. Letter by D.C, dated 12/07/2009
 23. Pre-authorization request dated 12/1/2009
 24. Therapy prescription by author unknown, dated 11/20/2009
 25. Health insurance claim form by MD, dated 11/02/2009
 26. Notice by Beatriz, dated 11/02/2009
 27. Pre-authorization request dated 9/21/2009
 28. EMG consult by MD, dated 9/21/2009
 29. EMG consult by MD, dated 9/21/2009
 30. EMG consult by MD, dated 9/21/2009
 31. Clinical note by author unknown, dated 8/28/2009
 32. Letter by MD, dated 8/24/2009
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33. Medical report by MD, dated 8/20/2009 to 3/19/2010
34. Prescription note by author unknown, dated 8/20/2009
35. Medical report by MD, dated 8/20/2009
36. MRI right shoulder by MD, dated 8/5/2009
37. MRI right shoulder without contrast by MD, dated 8/05/2009
38. Letter by MD, dated 7/28/2009
39. Subsequent medical report by MD, dated 7/17/2009
40. Doctor evaluation by MD, dated 6/21/2008
41. Form by author unknown, dated 5/29/2008
42. Subsequent medical report by MD, dated 2/14/2008 to 3/19/2010
43. Prescription note by DC dated 2/5/2008
44. Fax page dated 12/7/2006
45. Letter by author unknown, dated 12/7/2006
46. Weekly report by PhD, dated 12/7/2006
47. Patient data dated 12/5/2006
48. Letter by, dated 11/21/2006
49. Daily sheet by author unknown, dated 11/20/2006 to 12/08/2009
50. Letter by D.C, dated 11/20/2006
51. Fax page dated 11/16/2006
52. Behavioral evaluation of pain by PhD, dated 11/13/2006
53. Letter by PhD, dated 11/13/2006
54. Letter by DC, dated 11/10/2006
55. Impairment rating report, dated 11/10/2006
56. Review of medical history by MD, dated 11/10/2006
57. Report of medical evaluation by MD, dated 11/10/2006
58. Pain management follow-up consult by MD, dated 11/08/2006
59. Letter by MD, dated 11/8/2006
60. Initial functional evaluation dated 11/6/2006
61. Bill, dated 11/02/2006
62. Documentation summary by DC, dated 10/25/2006
63. Pre-authorization request dated 10/24/2006
64. Daily soap by author unknown, dated 10/10/2006 to 1/27/2010
65. Letter by D.C, dated 9/29/2006
66. Medical report by author unknown, dated 9/27/2006
67. Letter by author unknown, dated 9/7/2006
68. Work status report by author unknown, dated 9/21/2006 to 12/08/2009
69. Letter by, dated 9/13/2006
70. Letter by MD, dated 9/05/2006
71. Report of medical evaluation by author unknown, dated 9/05/2006
72. Letter by DC, dated 8/30/2006
73. Clinical note by MD, dated 8/25/2006
74. Operative report by MD, dated 8/24/2006
75. Anesthesia record by author unknown, dated 8/24/2006
76. Operative report by MD, dated 8/24/2006
77. Operative report by MD, dated 8/24/2006
78. Letter by DC, dated 8/21/2006
79. Letter by MD, dated 8/17/2006
80. Medical report by MD, dated 8/16/2006
81. Subsequent medical report by MD, dated 8/16/2006 & 8/23/2006
82. Letter by author unknown, dated 8/2/2006
83. Letter by, dated 7/31/2006
84. Authorization recommendation by RN, dated 7/24/2006
85. Request for active rehabilitation by DC, dated 7/19/2006
86. Pre-authorization request dated 7/19/2006
87. Medical report by author unknown, dated 6/29/2006
88. Bill, dated 6/29/2006
89. Report of medical evaluation dated 6/23/2006
90. Report of medical evaluation by MD, dated 6/23/2006
91. Report of medical evaluation by MD, dated 6/23/2006
92. Review of medical history & physical exam by author unknown, dated 6/23/2006
93. Daily sheet by author unknown, dated 6/15/2006 to 10/06/2006
94. Explanation of benefits by author unknown, dated 6/14/2006 & 8/14/2006
95. Patient note by author unknown, dated 5/30/2006 to 8/10/2006
96. Work status report by author unknown, dated 5/22/2006 to 8/21/2006
97. Daily sheet by author unknown, dated 5/22/2006 to 8/22/2006

98. Daily sheet by author unknown, dated 5/20/2006
99. Account notes by author unknown, dated 5/20/2006 to 8/02/2006
100. DWC ordered exam by , dated 5/10/2006
101. Letter by author unknown, dated 5/4/2006
102. Letter by author unknown, dated 5/4/2006
103. Pre-authorization request dated 5/1/2006
104. Documentation summary by DC, dated 5/1/2006
105. Pre-authorization request dated 5/1/2006
106. Documentation summary by DC, dated 5/1/2006
107. Work status report by author unknown, dated 4/26/2006
108. Work status report by author unknown, dated 4/24/2006
109. Office visit by DC, dated 4/24/2006
110. Operative report by MD, dated 4/20/2006
111. Procedure form by author unknown, dated 4/20/2006
112. Operative report by MD, dated 4/20/2006
113. Operative report by MD, dated 4/20/2006
114. Operative report by MD, dated 4/20/2006
115. Interim report by author unknown, dated 4/17/2006 to 8/23/2006
116. History note by MD, dated 3/28/2006
117. Authorization recommendation by RN, dated 3/24/2006
118. Workers compensation work status report dated 3/21/2006
119. Letter by MD, dated 3/21/2006
120. Daily notes dated 3/20/2006
121. Daily notes by author unknown, dated 3/20/2006
122. History note by MD, dated 3/17/2006
123. Subsequent medical report by MD, dated 3/15/2006 & 4/19/2006
124. Medical report by MD, dated 3/15/2006 to 4/26/2006
125. Medical report by MD, dated 3/15/2006
126. Report of medical evaluation by author unknown, dated 3/10/2006
127. Medical evaluation report by MD, dated 3/10/2006
128. History & physical exam by MD, dated 3/10/2006
129. Workers compensation by author unknown, dated 2/22/2006
130. Workers compensation work status report dated 2/21/2006
131. Office visit by DC, dated 2/21/2006
132. Subsequent medical report by MD, dated 2/15/2006
133. Initial consult by MD, dated 2/3/2006
134. Consent and release form by author unknown, dated 2/2/2006
135. Visual pain rating scale & pain diagram dated 2/2/2006
136. Physical therapy re-evaluation dated 2/2/2006
137. Subsequent medical report by MD, dated 1/18/2006
138. Daily notes by author unknown, dated 1/9/2006 to 4/24/2006
139. Explanation of benefits dated 1/3/2006 to 2/22/2006
140. Daily notes by author unknown, dated 1/02/2006
141. Letter by author unknown, dated 12/7/2005
142. Explanation of review dated 12/7/2005
143. Letter by author unknown, dated 12/7/2005
144. Explanation of review by author unknown, dated 12/7/2005 to 7/27/2006
145. Consent and release form by author unknown dated 12/1/2005
146. Visual pain rating scale and pain diagram dated 12/1/2005
147. Functional capacity evaluation by author unknown dated 12/1/2005
148. Pain questionnaire dated 12/1/2005
149. Explanation of benefits dated 11/29/2005
150. Authorization recommendation by RN, dated 11/21/2005
151. Outpatient authorization recommendation by author unknown dated 11/21/2005
152. Clinical note by MD dated 11/11/2005
153. Anesthesia record by author unknown dated 11/10/2005
154. Operative report by MD dated 11/10/2005
155. Statement of pharmacy services by author unknown dated 11/6/2005
156. Documentation of procedure by PhD, dated 11/3/2005 to 2/1/2006
157. Report of medical evaluation by author unknown dated 10/28/2005
158. Report of medical evaluation by MD dated 10/28/2005
159. Review of medical history and physical exam by MD dated 10/28/2005
160. Explanation of benefits by author unknown dated 10/20/2005
161. Request for reconsideration by PhD dated 10/10/2005
162. Letter by author unknown dated 10/7/2005

163. Outpatient authorization recommendation by RN dated 10/7/2005
164. Outpatient authorization recommendation by author unknown dated 10/7/2005
165. Fax page dated 10/4/2005
166. Office visit by DC dated 9/29/2005 to 12/21/2005
167. Behavioral evaluation of pain by PhD, dated 9/26/2005
168. EMG report by MD dated 9/19/2005
169. Subsequent medical report by MD dated 9/14/2005 to 11/9/2005
170. Behavioral evaluation by PhD dated 9/13/2005
171. Lab report by author unknown, dated 9/11/2005 & 4/17/2006
172. Daily notes by DC dated 8/29/2005 to 1/9/2006
173. MRI hip right by MD dated 8/26/2005
174. Workers compensation benefit verification by author unknown dated 8/23/2005
175. Work simulation testing by Author unknown, dated 8/22/2005
176. Functional capacity evaluation by, dated 8/22/2005
177. Dallas pain questionnaire by Author unknown, dated 8/22/2005
178. Daily notes by DC dated 8/15/2005 to 8/26/2005
179. Patient inquiry by author unknown, dated 7/30/2005 to 5/4/2006
180. Patient inquiry by author unknown, dated 7/30/2005 to 5/4/2006
181. Visual pain rating scale dated 7/20/2005
182. Consent and release form by Author unknown, dated 7/20/2005
183. Explanation of review by Author unknown, dated 7/11/2005
184. Prescription note by, dated 7/5/2005
185. Health insurance claim form by MD, dated 6/22/2005
186. Fax page dated 6/21/2005
187. PPE ext rehab by, dated 6/20/2005
188. Daily notes by, dated 6/15/2005 to 8/17/2005
189. Testing summary report dated 6/3/2005 to 12/2/2005
190. Procedure form by Author unknown, dated 6/2/2005
191. Anesthesia record by Author unknown, dated 6/2/2005
192. Operative report by MD, dated 6/2/2005
193. Operative report by MD, dated 6/2/2005
194. Letter by MD, dated 5/17/2005
195. Office visit by, dated 5/16/2005 to 7/29/2005
196. Lab report by Author unknown, dated 5/11/2005
197. Explanation of benefits by author unknown, dated 5/11/2005
198. Interim report by author unknown dated 5/11/2005 & 11/4/2005
199. Letter by Author unknown, dated 5/4/2005
200. Daily notes by, dated 5/4/2005 to 5/31/2005
201. Laboratory report by author unknown, dated 5/1/2005
202. Work status report by author unknown dated 4/29/2005 to 12/21/2005
203. Fax page dated 4/28/2005
204. Stimulator supply order by, dated 4/24/2005
205. Report of medical evaluation dated 4/22/2005
206. Report of medical evaluation by MD, dated 4/22/2005
207. History and physical exam by MD, dated 4/22/2005
208. Anesthesia record by author unknown, dated 4/20/2005
209. Worker's compensation by Author unknown, dated 4/5/2005
210. Work status report by Author unknown, dated 3/23/2005 to 7/29/2005
211. Subsequent medical report by MD, dated 3/23/2005 to 12/22/2005
212. Explanation of benefits by Author unknown, dated 3/8/2005 and 4/20/2005
213. Letter of medical necessity by, dated 3/8/2005
214. Description of service by Author unknown, dated 3/8/2005
215. Clinical note by Author unknown, dated 3/8/2005
216. Clinical note by author unknown dated 3/8/2005
217. Peer review by DC dated 03/04/2005
218. Functional testing by author unknown dated 03/01/2005
219. Subsequent medical report by author unknown dated 02/19/2005
220. Health insurance claim form by MPT dated 2/11/2005
221. Patient information by author unknown dated 02/11/2005
222. Clinical note by author unknown dated 02/05/2005
223. Subsequent medical report by author unknown dated 01/19/2005
224. Functional capacity evaluation by author unknown dated 01/03/2005
225. Work simulation testing by author unknown dated 01/03/2005
226. Documentation of procedure by PhD dated 1/3/2005 to 1/12/2006
227. Office visit by DC dated 12/20/2004

228. Magnetic resonance arthrography by MD dated 12/08/2004
229. Clinical note by author unknown dated 12/01/2004
230. Orthopedic consultation by MD dated 11/24/2004
231. Worker's compensation form by author unknown, dated 11/24/2004
232. NMES muscle stimulator supply order by DC dated 11/24/2004
233. NMES muscle stimulator supply order by DC dated 11/24/2004
234. Workman's compensation by author unknown, dated 11/24/2004
235. Form by author unknown, dated 11/24/2004
236. Request for authorization by DC dated 11/23/2004
237. Office visit by DC dated 11/17/2004
238. MRI shoulder right w/o contrast by MD dated 11/12/2004
239. MRI elbow right w/o contrast by MD dated 11/12/2004
240. MRI elbow by M, dated 11/12/2004
241. Workers compensation benefit verification by author unknown dated 11/03/2004
242. History note by DC dated 11/01/2004
243. Daily notes by DC dated 11/01/2004 to 03/02/2005
244. Health insurance claim form by author unknown dated 09/23/2004
245. History note by MD dated 08/30/2004 to 10/27/2004
246. Final treatment report by MD dated 08/16/2004
247. History note by PAC dated 07/19/2004
248. History note by author unknown dated 07/07/2004
249. Notes by author unknown, dated 6/23/2004
250. Work status report dated 6/23/2004
251. Notes by author unknown, dated 6/18/2004
252. Activity status report by PT dated 06/18/2004
253. Progress note by PT dated 06/18/2004 to 10/19/2004
254. Work status report by author unknown dated 06/16/2004 to 01/06/2005
255. Notes by author unknown, dated 6/16/2004
256. Notes by author unknown dated 6/14/2004
257. Work status report dated 6/14/2004
258. Notes by author unknown, dated 6/14/2004
259. Physician activity status report by PT dated 06/14/2004
260. History note by MD dated 06/14/2004 to 08/14/2004
261. Employer's first report dated 6/5/2004
262. Office visit by DC dated 01/06/2004
263. Patient information by author unknown, dated unknown
264. Report of medical evaluation by author unknown, dated unknown
265. Letter by, dated unknown
266. Insurance card dated unknown
267. Billing charges dated unknown.
268. Statement of medical necessity by author unknown dated unknown.
269. pain questionnaire by author unknown dated unknown.
270. Form by author unknown, dated unknown
271. Clinical note dated unknown
272. Pain management program by PhD, dated unknown
273. Request for reconsideration by Bertha Gutierrez, dated unknown
274. Outpatient authorization by author unknown, dated unknown
275. Work status report by author unknown, dated unknown
276. Extremities exam by author unknown, dated unknown
277. Letter by, dated unknown
278. Evaluation of medical care, dated unknown
279. Form by author unknown, dated unknown
280. Medical fee guideline, dated unknown
281. Identification card, dated unknown
282. Doctor roles, responsibilities and rights dated unknown
283. Clinical note by author unknown, dated unknown
284. Evaluation summary by PhD, dated unknown
285. Billing charges description of services by Author unknown, dated unknown,
286. Billing charges dated unknown
287. Fair and reasonable fees dated unknown
288. Letter by PhD dated unknown
289. Clinical note by dated unknown
290. Doctor roles responsibilities and rights dated unknown

INJURED EMPLOYEE CLINICAL HISTORY [SUMMARY]:

The injured employee is a male with a long standing history of lateral epicondylitis of the elbow. On 6/2/05, he is post osteotripsy and right partial lateral epicondylectomy and extensor carpi radialis brevis release on 8/24/06. He has been treated extensively with conservative measures and still has persistent elbow pain, which he reports is severe in nature. He has received injections, Physical Therapy (PT), bracing and medications. There was an EMG which found median nerve compression around the wrist, there was demyelination, but not axonal degeneration. No significant pathology of elbow on imaging provided. He also has had shoulder surgery in 2005.

The latest physical exam reveals tenderness at lateral epicondyle; specifically, the lateral epicondyle of the elbow and at the carpal tunnel.

ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS AND CONCLUSIONS USED TO SUPPORT THE DECISION.

This Injured Employee has a long standing history of lateral epicondylitis and has failed not only extensive conservative measures, but also two surgical procedures. The request for repair of the right extensor tendon origin with anconeus transfer is denied; the previous denial is upheld.

According to ODG, this surgery is still under study in the current medical literature.

In summarizing the literature for surgery for recalcitrant lateral epicondylitis: (the full abstracts below)

1. Br Med Bull. 2008; 88(1):171-88. Epub 2008 Sep 26. Operative management of tennis elbow: a quantitative review.

Karkhanis S, Frost A, Maffulli N.

The authors reviewed the literature and stress the need for well-designed adequately powered randomized controlled trials to be able to understand which of these operative techniques is really superior to the others.

2. J Bone Joint Surg Am. 2007 Aug;89(8):1693-9. Quality of prospective controlled randomized trials. Analysis of trials of treatment for lateral epicondylitis as an example. Cowan J, Lozano-Calderón S, Ring D.

The authors reviewed the literature and the reviewers rated the majority of studies as Level II (91% and 94%) and as unsatisfactory according to the Coleman Methodology Score (87% and 89%) and the CONSORT score (62% and 63%). Areas of deficiency included poor descriptions of recruitment (>90% of the trials), power-level calculations (73%), randomization (58%), blinding (90%), and participant flow (50%) as well as inadequate follow-up, sample size, and blinding.

3. J Hand Surg Am. 1998 Jul;23(4):723-31. Epicondylar resection with anconeus muscle transfer for chronic lateral epicondylitis.

Almquist EE, Necking L, Bach AW.

This was a retrospective review of 61 patients treated by limited surgical resection versus wide surgical excision of the aponeurosis and coverage by a vascularized rotational pedicle flap of the anconeus muscle. Evaluation at an average of 48 months after surgery indicates that compared with the limited surgical resection group, a higher percentage of patients in the anconeus muscle transfer group were able to perform strenuous activities with complete or near-complete pain relief. A higher percentage also returned to work or to normal activities; 94% of the patients were satisfied with the results of the procedure. This study indicates that this is an effective primary operative treatment for lateral epicondylitis when conservative treatment has failed. It also is effective in patients who continue to have persistent pain and inability to perform normal activities after previous lateral epicondylar release or resection.

4. Acta Orthop Belg. 2005 Apr;71(2):154-6. Anconeus muscle transposition for failed surgical treatment of tennis elbow: preliminary results. Degreef I, Van Raebroeckx A, De Smet L.

The authors conducted a retrospective study on their first 10 patients treated with an anconeus muscle transposition after failed surgery for chronic lateral epicondylitis. All patients had initially been treated conservatively and subsequently with a classical or percutaneous release of the common extensor origin. The secondary procedure involved wide excision of the common extensor origin, débridement of the lateral epicondyle and rotation of the anconeus muscle into the defect. At follow-up the results were excellent in 3 patients, good in 4 and poor in 3. This appears as a valid salvage procedure for lateral epicondylitis, since the operation was performed as a second or even a third approach.

5. Am J Sports Med. 2008 Feb;36(2):261-6. Epub 2007 Nov 30. Ten- to 14-year follow-up of the Nirschl surgical technique for lateral epicondylitis Dunn JH, Kim JJ, Davis L, Nirschl RP.

The mini-open Nirschl surgical technique with accurate resection of the tendinosis tissue remains highly successful in the long term in this single surgeon retrospective review of 139 patients.

6. Rheumatol Int. 2010 Mar 26. [Epub ahead of print] Outcome of Boyd-McLeod procedure for recalcitrant lateral epicondylitis of elbow. Reddy VR, Satheesan KS, Bayliss N.

Various surgical procedures including percutaneous and open release and arthroscopy procedures have been described to treat recalcitrant tennis elbow. The Boyd McLeod procedure involves excision of the proximal portion of the annular ligament, release of the origin of the extensor muscles, excision of the bursa if present, and excision of the synovial fringe. The authors conclude that Boyd-McLeod procedure is an effective treatment option in patients with resistant lateral epicondylitis after a retrospective review of 27 patients.

As you can see from the above, there is not good literature on promising results of surgical treatment for recalcitrant lateral epicondylitis. The review articles indicate a lack of high level evidence studies and several other retrospective case series report varied results. They are single center and sometimes single surgeon results, not

reproduced in the literature. In addition, there was one article describing the proposed surgery in 1998. Despite 12 years since, there are no additional studies on this specific procedure.

In addition, one of the most concerning complications of aggressive surgical debridement for lateral epicondylitis (tennis elbow) is lateral elbow instability. The proximity of the lateral collateral ligaments and the annular ligament makes them susceptible to injury. Other complications include recurrence or incomplete relief of pain. There is nothing to support that the proposed procedure would provide pain relief for the Injured Employee.

The additional information provided does not change my decision. The Injured Employee had ortho tripsy, followed a short time later by Extensor carpi radialis brevis release, partial epicondylectomy and anconeus transfer in 2006. There has never been a recovery despite extensive intervention. A repeat anconeus transfer would not succeed and in this case, there most likely is extensive scar tissue which would make the transfer difficult, if not impossible due to lack of available tissue.

The recommendation is to uphold the previous denial.

A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:

- ACOEM- AMERICAN COLLEGE OF OCCUPATIONAL & ENVIRONMENTAL MEDICINE UM KNOWLEDGEBASE
- AHCPR- AGENCY FOR HEALTHCARE RESEARCH & QUALITY GUIDELINES
- DWC- DIVISION OF WORKERS COMPENSATION POLICIES OR GUIDELINES
- EUROPEAN GUIDELINES FOR MANAGEMENT OF CHRONIC LOW BACK PAIN
- INTERQUAL CRITERIA
- MEDICAL JUDGEMENT, CLINICAL EXPERIENCE AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS
- MERCY CENTER CONSENSUS CONFERENCE GUIDELINES
- MILLIMAN CARE GUIDELINES
- ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES
- PRESSLEY REED, THE MEDICAL DISABILITY ADVISOR
- TEXAS GUIDELINES FOR CHIROPRACTIC QUALITY ASSURANCE & PRACTICE PARAMETERS
- TEXAS TACADA GUIDELINES
- TMF SCREENING CRITERIA MANUAL
- PEER REVIEWED NATIONALLY ACCEPTED MEDICAL LITERATURE (PROVIDE A DESCRIPTION)
- OTHER EVIDENCE BASED, SCIENTIFICALLY VALID, OUTCOME FOCUSED GUIDELINES (PROVIDE A DESCRIPTION)

1. Br Med Bull. 2008;88(1):171-88. Epub 2008 Sep 26. Operative management of tennis elbow: a quantitative review. Karkhanis S, Frost A, Maffulli N.

2. J Bone Joint Surg Am. 2007 Aug;89(8):1693-9. Quality of prospective controlled randomized trials. Analysis of trials of treatment for lateral epicondylitis as an example. Cowan J, Lozano-Calderón S, Ring D.

3. J Hand Surg Am. 1998 Jul;23(4):723-31. Epicondylar resection with anconeus muscle transfer for chronic lateral epicondylitis. Almquist EE, Necking L, Bach AW.

4. Acta Orthop Belg. 2005 Apr;71(2):154-6. Anconeus muscle transposition for failed surgical treatment of tennis elbow: preliminary results. Degreef I, Van Raebroeckx A, De Smet L.

5. Am J Sports Med. 2008 Feb;36(2):261-6. Epub 2007 Nov 30. Ten- to 14-year follow-up of the Nirschl surgical technique for lateral epicondylitis Dunn JH, Kim JJ, Davis L, Nirschl RP.

6. Rheumatol Int. 2010 Mar 26. [Epub ahead of print] Outcome of Boyd-McLeod procedure for recalcitrant lateral epicondylitis of elbow. Reddy VR, Satheesan KS, Bayliss N.