

REFERENCES

1. Alonso-Llames, M.: Bilaterotricipital approach to the elbow. Its application in the osteosynthesis of supracondylar fractures of the humerus in children. Acta ortho. Scan., 43:479, 1972.
2. Arino, V.L., Lluch, E.E., Ramirez, A.M., Ferrer, J., Rodriguez, L., and Baixauli, F. : Percutaneous Fixation of supracondylar fractures of the humerus in children. J. Bone Joint Surg., 59-A:917, 1977.
3. Aronson, D.D., and Prager, B.I., : Supracondylar fractures of the humerus in children. A modified technique for closed pinning. Clin. ortho., 219:174, 1987.
4. Baumann, E.:Uber Regenerationsercheinungen am verletzten Ellbogen. Schweiz. Med. Wochenschr., 54:1057, 1924.
5. Carcassonne, M., and Hornung, H., : Results of operative treatment of severe supracondylar fractures of the elbow in children. J. Pediatr. Surg., 7:676, 1972.
6. Coventry, B.B., and Henderson, C.C: Supracondylar fractures of the humerus-49 cases in children. Rocky Mt Med. J., 53:458, 1956.
7. Danielson, L., and Petersson, H.: Open reduction and pin fixation of severely displaced supracondylar fractures of the humerus in children. Acta ortho Scand., 51:249, 1980.
8. Flynn, J.C., Mathews, J.G., and Benoit, R.L. : Blind pinning of displaced supracondylar fractures of the humerus in children. Sixteen years

- experience with long term follow up. J. Bone Joint Surg., 56-A263, 1974.
9. Fowles, J.V., and Kassab, M.T.: Displaced supracondylar fractures of the elbow in children. A report on the fixation of extension and flexion fractures by two lateral percutaneous pins. J. Bone joint surb., 56-B: 490, 1974.
10. Giannini, S., Maffel, G., Girolami, M., and Ceccarlli, F.: The treatment of supracondylar fractures of the humerus in children by closed reduction and fixation with percutaneous Kirschner wires. Ital. J. Orthop. Traumatol., 9:181, 1983.
11. Gruber, M.A., and Hudson, O.C.: Supracondylar fracture of the humerus in childhood. End result study of open reduction. J.Bone Joint Surg., 46-A:1245, 196422.
12. Herzenberg, J.E., Koreska, J., Carroli, N.C., and Rang, M.: Biomechanical testing of pin fixation techniques for pediatric supracondylar elbow fractures. Orthop. Trans., 12:678-679, 1988.
13. Holmberg, I.: Fractures of the distal end of the humerus in children. Acta Chir. Scand. (suppl), 103, 1945.
14. Jones, K.G.: Percutaneous pin fixation of fractures of the lower end of the humerus. Clin. Orthop., 50:53-69, 1967.
15. Kallio, P.E., Foster, B.K., and Paterson, D.C.: Difficult supracondylar elbow fractures in children : analysis of percutaneous pinning technique. J.Pediat. Orthop., 12:11-15, 1992.

16. Krebs, B.: Surgical treatment of supracondylar humeral fractures in children. Ugeskr. Laeger, 142 : 871,1980.
17. La Grange,J., and Rigault, P.: Treatment of supracondylar fractures of the humerus in children. Presse Med., 78:2382,1970.
18. Mehserle, W.L., and Mcehan, P.L.: Treatment of the displaced supracondylar fractures of the humerus (type 3) with closed reduction and percutaneous pin fixation. J. Pediat Orthop., 11:705-711,1991.
19. Miller, E.M., Fell, E.H., Brock, C., Todd,M.C., and Requarth, W.H.: Progress in the management of severe supracondylar fractures of the elbow. Ann. ssurg. 118: 1098,1941
20. Navht, J.L., Ecker,M.L., chung, S.M., Lotke, P.A. and Das, M.: Supracondylar fractures of the humerus in children treated by closed reduction and percutaneous pinning. Clin. Ortho., 177:203,1983.
21. Prietto, C.A.: Supracondylar fractures of the the humerus. A comparative study of Dunlop's traction versus percutaneous pinning., J. Bone Joint Surg.61- A:425,1979
22. Ramsey, R.H., and Griz, J.: Immediate Open reduction and internal fixation of severely displaced supracondylar fracture of the humeral in children. Clin. Ortho.,90:130,1973.
- 23 Royce,R.O., Dutkowsky,J.P., and Kasser, J.R., and Rand,F.R.: Neurologic complications after K-wire fixation of supracondylar humerus fractures in chidren.J. Pediat.. Orthop., 11:191-194,1991.

24. Sobjerg, J.O., and Blom,L.: Percutaneous fixation of supracondylar fractures of the humerus in children. Ugeskr. Laeger, 145:1775,1983.
25. Sutton, W.R.: Displaced supracondylar humerus fractures in children : A comparison of results and costs in patients treated by skeletal traction sersus percutaneous pinning Clin. Orthop, 278:81;1982.
26. Walloe,A., Egund, N., and Eikelund, L.: Review of closed and open reduction leading to a proposal for treatment. Injury, 16:296, 1985.
27. Weiland, A.J., Meyer, s., Tolo, V.T., Berg,H.L., and Mueller, J.: Surgical treatment of dispaced supracondylar fractures of the humerus in children. Analysis of fifty-two cases followed for five to fifteen years.J. Bone Joint Surg., 60-A:657,1978.
28. Ziont, L.E.: Torsional strength of pin configuration used to fix supracondylar fractures of the the humerus in chidren. J. Bone Joint Surg., 76-A,253,1994.

APPENDIX I

Name..... ID No.

HN..... AN.....

Address.....

..... Tel.....

Date of Birth..... Age.....

Sex..... Side.....

Displacement

Nerve injury Preop/Post op

Time of surgery first/second.....

Baumann angle Preop Normal/injured.....

Baumann angle Postop Normal/injured.....

Satisfaction Score (by visual analog scale 0-10), parent score =

blind evaluator =

Range of motion Normal/injured

Complication

Total cost Provider.....

Parents

VITAE

Mr. Kamolporn Kaewpornsawan was born on 24 April 1958 in Ayudhaya, Thailand. He graduated Medical Doctor from Faculty of Medicine, Prince of Songkla University in 1981. He took Thai Board of Orthopaedic Surgery in 1987 and went to study in Paris, France between 1990-1992. Receiving certificate fellowship in orthopaedic surgery and pediatric orthopaedic surgery and diplome interuniversitaire de specialization, partielle (ortho) from university Paris in 1992. He is now working as assistant professor in department of orthopaedic surgery, Faculty of Medicine, Siriraj hospital, Mahidol University.

