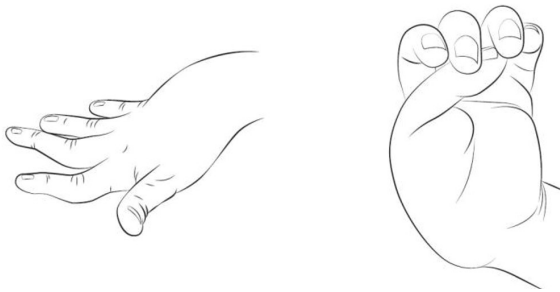


SEREBRAL PALSİDE ÜST EKSTREMİTE SORUNLARI

5. BÖLÜM

Caner Mesut MATARACI¹
Atilla ÇITLAK²

Serebral Palsi (SP)'de santral sinir sistemindeki hasara bağlı; eklemlerde birçok klinik tablo ortaya çıkabilir bunlar; kas fibrozisi, atrofi, eklem kontraktürü, kemik ve eklemlerde yapısal değişiklikler, eklemlerde instabilite problemleri ve ekstremitelerde uzunluk farklılığıdır (1,2). Farklı subtiplerde farklı klinik tablolar ortaya çıkabilir; diplejik hastalarda tutulum üst ekstremitelerde alt ekstremitelere göre daha hafiftir. Başta hemiplejik veya kuadruplejik hastalarda daha şiddetli olmak üzere, çoğu hastada üst ekstremitelerde tutulumu görülür (Şekil-1) (4,5).



Şekil 1. Solda parmakta kuğu boynu deformitesi ve sağda Thumb-in-Palm deformitesi

SP'deki üst ekstremitelerde cerrahisi altta yatan patolojiyi düzeltmeye yönelik olmayıp, palyatif ve progresyonu azaltmayı amaçlamaktadır (7,8). SP'li ço-

¹ Arş. Gör. Karadeniz Teknik Üniversitesi Tıp Fakültesi, Ortopedi ve Travmatoloji AD

² Doç. Dr. Karadeniz Teknik Üniversitesi Tıp Fakültesi, Ortopedi ve Travmatoloji AD

KAYNAKLAR

1. Holmström L, Vollmer B, Tedroff K, Islam M, Persson JK, Kits A, Forsberg H, Eliasson AC. Hand function in relation to brain lesions and corticomotor-projection pattern in children with unilateral cerebral palsy. *Dev Med Child Neurol* 2010;52(2):145–152
2. Tachdjian MO, Minear WL. Sensory disturbances in the hands of children with cerebral palsy. *J Bone Joint Surg Am* 1958;40(1):85–90.
3. Sawyer JR, Spence DD. Cerebral palsy. In: Azar F, Canale ST, Beatty JH, editors. *Campbell's Operative Orthopaedics*. Elsevier; 2017. p.1250–1299.
4. Kozin SH, Lightdale-Miric N. Spasticity Cerebral Palsy Traumatic Brain Injury. In: Wolfe S, Pederson W, Kozin SH, Cohen M, editors. *Green's Operative Hand Surgery*, 7th ed. Philadelphia: Elsevier; 2017. p.1080–106.
5. Mauck BM, Jobe MT. Cerebral Palsy of the Hand. In: Azar F, Canale ST, Beatty JH, editors. *Campbell's Operative Orthopaedics*. Philadelphia: Elsevier; 2017. p.3638–3659.
6. Koman LA, Gelberman RH, Toby EB, Poehling GG. Cerebral palsy: management of the upper extremity. *Clin Orthop Relat Res* 1990;(253):62–74.
7. Carroll RE. The treatment of cerebral palsy in the upper extremity. *Bull N Y Orthop Hosp* 1958;3:3–9.
8. Carroll RE, Craig FS. The surgical treatment of cerebral palsy: I. The upper extremity. *Surg Clin North Am* 1951;30: 385–396.
9. Lomita C, Ezaki M, Oishi S. Upper extremity surgery in children with cerebral palsy. *J Am Acad Orthop Surg* 2010;18(3):160–168.
10. Swanson AB: Surgery of the hand in cerebral palsy and the swan-neck deformity. *J Bone Joint Surg Am* 1960; 42: 951–964
11. Koman LA, Gelberman RH, Toby EB, et al: Cerebral palsy: management of the upper extremity. *Clin Orthop Relat Res* 1990; 253: 62– 74
12. Carlloz H, Brahimi L: Place of internal disinsertion of the subscapularis muscle in the treatment of obstetric paralysis of the upper limb in children. *Ann Chir Infant* 1971;12:159–167
13. Waters PM, Bae DS: The effect of derotational humeral osteotomy on global shoulder function in brachial plexus birth palsy. *J Bone Joint Surg Am* 2006;88:1035–1042
14. Waters PM, Bae DS: The effect of derotational humeral osteotomy on global shoulder function in brachial plexus birth palsy. *J Bone Joint Surg Am* 2006;88:1035–1042
15. Richards RR, Sherman RMP, Hudson AR, et al: Shoulder arthrodesis using a pelvic reconstruction plate: a report of 11 cases. *J Bone Joint Surg Am* 1988; 70:416–421
16. Dahlin LB, Komoto-TuFvesson Y, Salgeback S: Surgery of the spastic hand in cerebral palsy: improvement in stereognosis and hand function after surgery. *J Hand Surg [Br]*1998 23:335–339
17. Hoffer MM, Lehman M, Mitani M. Surgical indications in children with cerebral palsy. *Hand Clin* 1989;5(1):69–74.
18. Sindou MP, Simon F, Mertens P, Decq P. Selective peripheral neurotomy (SPN) for

- spasticity in childhood. *Childs Nerv Syst* 2007;23(9):957–970
19. Hoffer MM, Lehman M, Mitani M: Surgical indications in children with cerebral palsy. *Hand Clin* 1989; 5:69–74
 20. Maarrawi J, Mertens P, Luaute J, et al: Long-term functional results of selective peripheral neurotomy for the treatment of spastic upper limb: prospective study in 31 patients. *J Neurosurg* 104(2):215– 225, 2006
 21. Manske PR. Cerebral palsy of the upper extremity. *Hand Clin* 1990;6(4):697–709.
 22. Manske PR, Langewisch KR, Strecker WB, Albrecht MM. Anterior elbow release of spastic elbow flexion deformity in children with cerebral palsy. *J Pediatr Orthop* 2001;21(6):772– 777
 23. Mital MA. Lengthening of the elbow flexors in cerebral palsy. *J Bone Joint Surg Am* 1979;61(4):515–522.
 24. Ozkan T, Bicer A, Aydin HU, Tuncer S, Aydin A, Hosbay ZY. Brachialis muscle transfer to the forearm for the treatment of deformities in spastic cerebral palsy. *J Hand Surg Eur Vol* 2013;38(1):14–21.
 25. Ozkan T, Tuncer S, Aydin A, et al. Brachioradialis re-routing for the restoration of active supination and correction of forearm pronation deformity in cerebral palsy. *J Hand Surg Br* 2004;29(3):263–268
 26. Bunata RE. Pronator teres rerouting in children with cerebral palsy. *J Hand Surg Am* 2006;31(3):474.e1–e11
 27. Gschwind CR. Surgical management of forearm pronation. *Hand Clin* 2003;19(4):649–655
 28. Strecker WB, Emanuel JP, Dailey L, Manske PR. Comparison of pronator tenotomy and pronator rerouting in children with spastic cerebral palsy. *J Hand Surg Am* 1988;13(4):540–543.
 29. Sakellarides HT, Mital MA, Lenzi WD. Treatment of pronator contractures of the forearm in cerebral palsy by changing the insertion of the pronator radii teres. *J Bone Joint Surg Am* 1981;63(4):645–652
 30. Pletcher DF, Hoffer MM, Koffman DM. Non-traumatic dislocation of the radial head in cerebral palsy. *J Bone Joint Surg Am* 1976;58(1):104–105