tendons of the fingers is of importance in hand assessment, during reconstructive procedures such as considering tendons for transfer.

El-Badawi MGY, Butt MM, Al-Zuhair AGH, Fadel RA (1995) Extensor Tendons of the Fingers: Arrangement and Variations-II. Clin Anat 8:391-398.

Hirai Y, Yoshida K, Yamanaka K, Inoue A, Yamaki K, Yoshizuka M (2001) An anatomic study of the extensor tendons of the human hand. J Hand Surg [Am] 26(6):1009-15.

Kitano K, Tada K, Shibata T, Yoshida T (1996) Independent index extension after indicis proprius transfer: excision of juncturae tendinum. J Hand Surg [Am] 21(6):992-6.

Ogura T, Inoue H, Tanabe G (1987) Anatomic and clinical studies of the extensor digitorum brevis manus. J Hand Surg [Am] 12(1):100-7.

Paley D, McMurtry RY, Murray JF (1987) Dorsal dislocation of the ulnar styloid and extensor carpi ulnaris tendon into the distal radioulnar joint: the empty sulcus sign. J Hand Surg [Am] 12(6): 1029-32.

Rockwell WB, Butler PN, Byrne B. (2000) Extensor tendon: Anatomy, injury, and reconstruction. Plast Reconstr Surg 106: 1592-1603.

von Schroeder HP, Botte MJ (1993) The functional significance of the long extensors and juncturae tendinum in finger extension. J Hand Surg [Am] 18(4):641-7.

von Schroeder HP, Botte MJ, Gellman H (1990) Anatomy of the juncturae of the hand. J Hand Surg 15A:595-602.

Tan ST, Smith PJ (1999) Anomalous extensor muscles of the hand: a review, J Hand Surg [Am] 24(3):449-55

Zilber S, Oberlin C (2004) Anatomical variations of the extensor tendons to the finger over the dorsum of the hand: A study of 50 hands and a review of the literature. Plast Reconstr Surg 113:214-221.

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Expression of calcium-binding proteins in the proliferative zones around the cortico-striatal junction of rabbits during pre- and postnatal ages

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Herein we asked whether cells expressing calcium-binding proteins around the cortico-striatal junction are of pallial or subpallial origin. Brains of rabbit embryos between E18-E28 and postnatal P0-P22 were immunoreacted with monoclonal antibodies raised against calretinin, calbindin and parvalbumin. At E18-E21, calbindin-and calretinin-immunoreactive cells were seen in distinct proliferative zones in the vicinity of the cortico-striatal junction. Whereas calbindin-immunoreactive neurons were in the ventricular zone of the ventral pallium (the medial wall of the lateral ventricular angle), calretinin-immunoreactive cells were, nearby, in the subventricular zone of the subpallium at the lateral edge of the lateral ganglionic eminence. From E25 to P22, both, calbindin- and calretinin-immunoreactive cells appeared in the pallial ventricular and subventricular zones around the lateral ventricular angle. Some of these cells resembled migratory neuroblasts. Parvalbumin-immunoreactive cells appeared at P5-P10, albeit they were almost negligible in the proliferative zones around the cortico-striatal junction and the lateral ventricular angle. The results suggest that a number of the calbindin-expressing neurons that are generated in mid-gestation and postnatally are of pallial origin. They also indicate that only a few of the late-generated calretinin-immunoreactive cells may have a pallial source. The origin of the parvalbumin-immunoreactive cells was not ascertained in the present study.

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