10 Appendix

Table 42. Form for follow-up study of clubfeet.

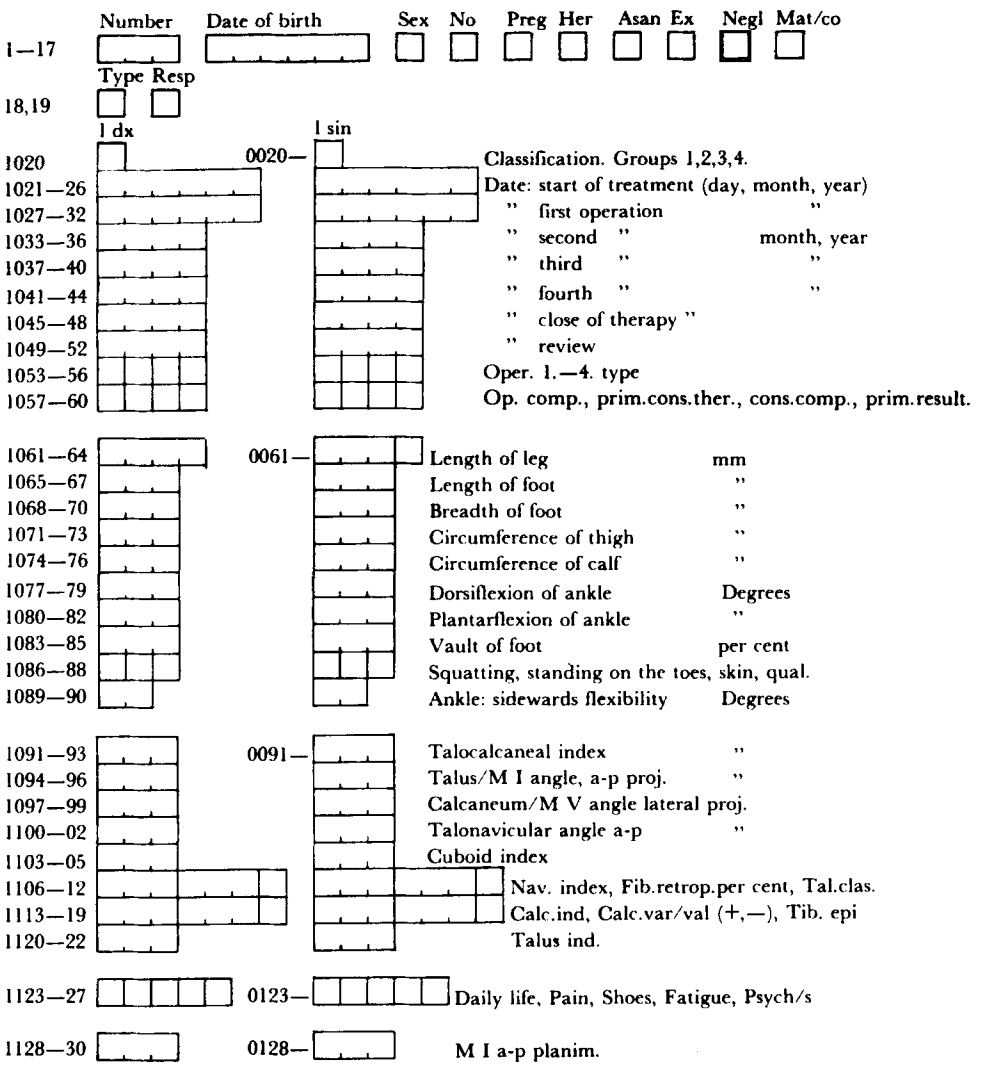
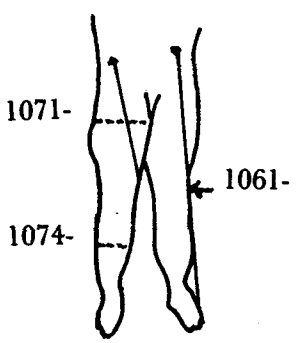


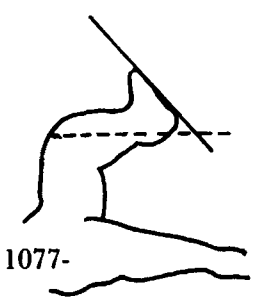
Table 43. Explanation of columns in Table 42.

Column 1—3	Cummulative number of cases
Column 4—9	Date of birth. Day, month, year
Column 10	Sex of patient. 1 : boy, 2 : girl
Column 11	Number of foetuses. 1 : one, 2 : two or more
Column 12	Complication in pregnancy. 1 : none, 2 : complication occurred
Column 13	Family history. 1 : there is a clubfoot, 2 : no clubfeet in family
Column 14	Associated anomaly. 1 : none, 2 : C-P, 3 : arthrogryposis, 4 : syndactyly or amniotic stricture, 5 : mental retardation, mongolism, major congenital anomaly (hips, cardiac, exomphalo, myelomeningocele etc.), 6 : multianomaly
Column 15	Possibility of contact. 1 : has been contacted, 2 : lost, 3 : dead
Column 16	Neglected treatment. 1 : no, 2 : yes
Column 17	Material of patients versus controls, 1 : TEV mat., 2 : cont. mat.
Column 18	Type of child. 1 : "sportsman", 2 : "normal", 3 : "bookworm"
Column 19	Informant. 1 : patient himself, 2 : guardian Hereafter the number which begins with 1 refers to the right, that with O to the left foot.
Column 1020	Quality of foot. 1 : no TEV, 2 : group 2, 3 : group 3, 4 : group 4
Column 1021—26	Start of treatment. Day, month, year
Column 1027—32	Date of first operation. Day, month, year
Column 1033—36	Date of second operation. Month, year
Column 1037—40	Date of third operation. Month, year
Column 1041—44	Date of fourth operaton. Month, year
Column 1045—48	Date of finishing therapy. Month, year
Column 1049—52	Date of follow-up examination and interview. Month, year
Column 1053—56	Type of operation 1.—4.: 1 : achilles tenotomy, 2 : myotomy, 3 : posterior release, 4 : posteromedial release, 5 : osteotomy, 6 : arthrodesis, 7 : medial release, 8 : plantar release, 9 : anterior release
Column 1057	Operative complication. 5 : none, 4 : wound dehiscation or infection, 3 : decubitus, 2 : skin necrosis, 1 : two or more of these
Column 1058	Primary conservative therapy. 1 : gentle, 2 : forceful, 3 : none

Column 1059	Complication of cons. therapy. 4 : none, 3 : decubitus, 2 : fracture, 1 : decubitus and fracture
Column 1060	Primary result of treatment one month after commencement of treatment. 3 : good, 2 : satisfactory, 1 : bad
Column 1061 —64	Length of the leg (from spina ilica ventr. to the lateral edge of the foot below the lateral melleolus). In millimeters (mm). Lying position
Column 1065 —67	Length of the foot (from heel to the apex of the big toe) in mm. Lying position
Column 1068 —70	Breadth of the foot (breadth of the sole from base of the big toe to that of dig V) in mm. Lying position
Column 1071 —73	Circumference of the thigh (at midpoint on the line spina iliaca ventralis — medial articular slit of the knee) in mm. Lying
Column 1074 —76	Circumference of the calf (at midpoint on the line medial articular slit of the knee — appex of the medial melleolus) in mm. Lying
Column 1077 —79	Dorsiflexion of the ankle (the angle between a plane kept against the sole and the axis of the tibia with bent knee and maximal dorsiflexion of foot), degrees
Column 1080 —82	Plantar flexion of the ankle (as the former but the foot in maximal plantar flexion)
Column 1083 —85	Vault of the foot (the share per cent of the area of foot print of the straight projection. See also picture)
Column 1086	Ability to squat with heels on the ground. 3 : good, 2 : half way, 1 : the heels leave the ground at an attempt
Column 1087	Ability to stand on the toes. 3 : good, 2 : fair, 1 : does not manage
Column 1088	Condition of the skin. 3 : normal, 2 : there is a clavus, 1 : decubitus
Column 1089 —90	Sidewards flexibility of the ankle (the angle between maximal varus and valgus is measured keeping a plane against the sole when the patient is lying) in degrees
Column 1091 —93	The talocalcaneal index (sum of talocalcaneal angles in a-p and lateral projections) in degrees
Column 1094 —96	Talus/M I angle (in a-p projection, + : adductus, — : abductus). Degrees
Column 1097 —99	Calcaneum/M V angle (in lateral projection) in degrees
Column 1100 —02	The talonavicular angle (in a-p projection) in degrees
Column 1103 —05	The cuboid index (sum of a-p and lateral planimetric values of the cuboid)

Column 1106 —08	The navicular index (sum of the planimetric values of navicular in a-p and latelar projections)
Column 1109 —11	Fibular retroposition (in lateral projection) per cent
Column 1112	The classification of talus (according to Keim and Ritchie). 4 : normal, 3 : slight deformity, 2 : moderate deformity, 1 : grave deformity
Column 1113 —15	The calcaneal index (the planimetric value of calcaneum in lateral projection)
Column 1116 —18	Calcaneovarus/-valgus (suroplantar projection, + : varus, — : valgus). Degrees
Column 1119	Changes in the area of the tibial epiphysis (a-p projection). 3 : none, 2 : epiphyseal damage, 1 : this and varus or valgus
Column 1120 —22	The talar index (planimetric value of talus in lateral projection)
Column 1123	Daily life. 5 : no detriment, 4 : sometimes limits sport activity, 2 : sometimes limits normal activities, 1 : limits walking
Column 1124	Pain. 5 : none, 4 : mild pains upon strain, 3 : usually pain upon strain, 2 : pains accompanying normal activities, 1 : pain in walking
Column 1125	Shoes. 3 : using normal shoes freely, 2 : using normal shoes which, however, are quickly worn out, 1 : using orthopaedic shoes or other supportive measures
Column 1126	Fatigue. 3 : none, 2 : there is a difference upon strain, 1 : fatigue in normal activity
Column 1127	Psychological and social aspects. 5 : do not remember that there was a TEV, 4 : people sometimes laugh at my foot, 3 : I withdraw from sports and games, 2 : I have inferiority feelings, 1 : I am ashamed and isolate myself
Column 1128 —30	M I planimetry, a-p projection. (Used as a divisor to get the planimetric ratios of tarsal bones.)





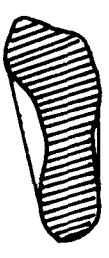
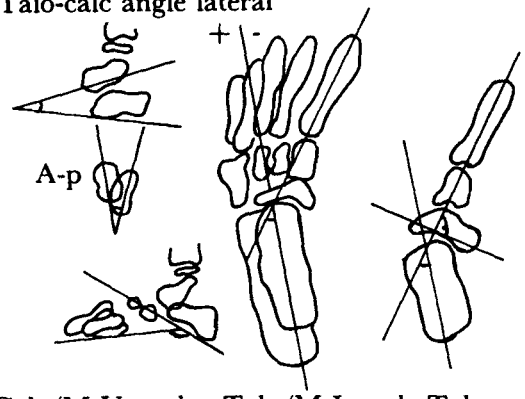


Table 44. Radiologic parameters

A-p projection	Number. Name Lateral projection	Date of birth Suroplantar project.	sin/dx The index	TEV/normal
Talocalcaneal angle	Talocalcaneal angle	Calcaneum var/valg.	Talocalcan index	
Talo/M I "	Calc/M V "			
Talo-navicul. angle	Talus, planimetry		Talar index	
Navicular, planimetry	Calc., planimetry		Calcaneal index	
Cuboid, planimetry	Navicular, planimetry		Cuboid index	
Tibial epihysis	Cuboid, planimetry			
M I planimetry	Fibular retroposit.			
	Talar deformity (Keim & Ritchie)			

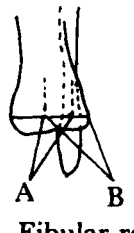
Talo-calc angle lateral



Calc/M V angle

Talo/M I angle

Talo-navicular angle



Fibular retroposition:

Tibial epiphysis: 3=normal, 2=deformity, 1=deform. and varus or val.
Fibular retroposition: A/B x 100 per cent
Keim & Ritchie: 4 : normal, no changes, 3 : mild changes (the upper border of talus loses some convexity, height of talus norm., 2 : moderate changes (there is no convexity, there might be concavity, talus gets lower, 1 : severe changes (all the former, talar size is more than 50 per cent subnormal. Changes in tibia and subtalar joint might occur).

Table 45. Techique of radiologic examination.

I Foot and ankle, dorsi-plantar (a-p) projection: Centre over the cuboid-navicular region. The tube is at 20° angle to the vertical. Focus-film distance is 115 cm. Three aluminium wedges are fixed on the toe side.

II Foot and ankle, lateral projection: Centre to the lateral cuboid aspect of each foot in turn using a horizontal tube projection. Focus-film distance is 115 cm.

III Suroplantar projection: The patient stands on the cassette. Centre is between the heels. The tube is at 45° angle to the vertical. Focus-film distance is 115 cm. Two wedges to the heel side.

IV Ankle joint a-p: Basic projection.

	kVp	mAS	Film	Screens Lanex	Grid
Dorsi-plantar	50—45	50—25	Fuji RX	Regular	—
Lateral	45—40	25—16	"	"	—
Ankle j. a-p	45—43	20—6.25	"	"	—
Suroplantar	50—45	40—25	"	"	—

An acryl brace is used in order to standardize the position of the foot in projections I and II. (The foot is fixed in a 15° plantar flexion in projections I and II and the hindfoot is parallel to the cassette in the lateral projection.) See also pictures in Chapter IV, methods.