**Table 1.** Classification of cases with congenital clubfoot and associated major congenital anomalies, 18 EUROCAT registries, 1995-2011

|  |  |  |
| --- | --- | --- |
| Classification | Most common associated anomalies |  |
| Multiple congenital anomaly1 | Total | N=591 |
|  | Congenital heart defects | 187 |
|  | Ventricular septal defect | 80 |
|  | Nervous system | 110 |
|  | Hydrocephalus | 39 |
|  | Urinary | 107 |
|  | Congenital hydronephrosis | 31 |
|  | Oral clefts | 75 |
| Genetic syndromes | Total | N=144 |
|  | 22q11.2 microdeletion | 14 |
|  | Pena-Shokeir syndrome type I | 13 |
| Teratogenic syndromes | Total | N=9 |
| Chromosomal | Total | N=246 |
|  | Edwards syndrome /trisomy 18 | 101 |
|  | Down syndrome/trisomy 21 | 48 |

1A case may have more than one associated congenital anomaly (example: clubfoot with VSD and hydronephrosis)

**Table 2** Prevalence per 1000 births of congenital clubfoot cases without chromosomal anomaly and congenital clubfoot cases without associated anomalies (isolated cases) in 18 EUROCAT registries, 1995-2011

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Registry | Time period | Total births | Total cases | Total cases without chromosomal anomaly | | Isolated congenital clubfoot cases | | |
|  |  |  |  | No | Prevalence (95% CI) per 1,000 birth | No | Prevalence (95% CI) per 1,000 birth | % of total cases |
| Belgium, Antwerp | 1997 – 2011 | 286,751 | 296 | 283 | 0.99 (0.88–1.10) | 243 | 0.85 (0.75–0.96) | 82 |
| Belgium, Hainaut | 1997 – 2005 | 110,557 | 64 | 63 | 0.57 (0.45–0.73) | 58 | 0.53 (0.41–0.68) | 91 |
| Croatia, Zagreb | 1995 – 2010 | 105,353 | 80 | 77 | 0.73 (0.59–0.91) | 67 | 0.64 (0.50–0.81) | 84 |
| Denmark, Odense | 1995 – 2011 | 92,211 | 122 | 120 | 1.30 (1.09–1.56) | 109 | 1.18 (0.98–1.43) | 89 |
| France, Paris | 1997 – 2011 | 508,721 | 572 | 545 | 1.07 (0.99–1.17) | 450 | 0.89 (0.81–0.97) | 79 |
| France, Strasbourg | 1997 – 2004 | 102,495 | 139 | 131 | 1.28 (1.08–1.52) | 113 | 1.10 (0.92–1.33) | 81 |
| Germany, Mainz | 1996 – 2011 | 52,190 | 72 | 70 | 1.34 (1.06–1.70) | 61 | 1.17 (0.91–1.50) | 85 |
| Germany, Saxony Anhalt | 1996 – 2011 | 250,210 | 413 | 388 | 1.55 (1.40–1.71) | 324 | 1.30 (1.16–1.44) | 79 |
| Ireland, Cork & Kerry | 1996 – 2010 | 131,119 | 158 | 143 | 1.09 (0.93–1.29) | 110 | 0.84 (0.70–1.01) | 70 |
| Italy, Emilia Romagna | 2000 – 2011 | 426,650 | 425 | 409 | 0.96 (0.87–1.06) | 352 | 0.83 (0.74–0.92) | 83 |
| Italy, Tuscany | 2002 – 2011 | 296,483 | 135 | 131 | 0.44 (0.37–0.52) | 119 | 0.40 (0.34–0.48) | 88 |
| Malta | 1996 – 2010 | 63,051 | 58 | 56 | 0.89 (0.68–1.15) | 45 | 0.71 (0.53–0.96) | 78 |
| Netherlands, Northern | 1995 – 2011 | 323,728 | 324 | 310 | 0.96 (0.86–1.07) | 259 | 0.80 (0.71–0.90) | 80 |
| Norway | 1999 – 2011 | 774,985 | 1111 | 1087 | 1.40 (1.32–1.49) | 1005 | 1.30 (1.22-1.38) | 91 |
| Poland, Wielkopolska | 1999 – 2010 | 440,096 | 396 | 387 | 0.88 (0.80–0.97) | 346 | 0.79 (0.71–0.87) | 87 |
| Spain, Basque Country | 1995 – 2010 | 297,531 | 148 | 134 | 0.45 (0.38–0.53) | 105 | 0.35 (0.29–0.43) | 71 |
| Switzerland, Vaud | 1997 – 2011 | 112,156 | 105 | 95 | 0.85 (0.69–1.04) | 79 | 0.70 (0.57–0.88) | 75 |
| UK, Wales | 1998 – 2011 | 466,301 | 840 | 783 | 1.68 (1.57–1.80) | 623 | 1.34 (1.24–1.45) | 74 |
| Total | 1995 – 2011 | 4840588 | 5458 | 5212 | 1.08 (1.05–1.11) | 4,468 | 0.92 (0.90–0.95) | 82 |

**Table 3.** Characteristics of congenital clubfoot cases confirmed in the validation study. Data from 16 EUROCAT registries1

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Total | | Male | | Female | |
|  | N | % | N | % | N | % |
| Confirmed clubfoot |  |  |  |  |  |  |
| Total | 286 |  | 186 | 65% | 96 | 34% |
| Birth type |  |  |  |  |  |  |
| Livebirth | 269 | 94% | 180 | 97% | 89 | 93% |
| Stillbirth | 5 | 2% | 2 | 1% | 3 | 3% |
| TOPFA | 12 | 4% | 4 | 2% | 4 | 4% |
| Malformations |  |  |  |  |  |  |
| Isolated clubfoot | 210 | 75% | 141 | 76% | 68 | 73% |
| Associated with other anomalies | 72 | 25% | 44 | 24% | 25 | 27% |
| Unknown due to termination | 4 |  | 0 |  | 3 |  |
| Laterality |  |  |  |  |  |  |
| Bilateral | 158 | 57% | 105 | 58% | 50 | 56% |
| Unilateral | 117 | 43% | 76 | 42% | 40 | 44% |
| left | 45 | 16% | 30 | 16% | 14 | 15% |
| right | 65 | 24% | 41 | 22% | 24 | 25% |
| unilateral, side unknown | 7 | 3% | 5 | 3% | 2 | 2% |
| Unknown | 11 |  | 5 |  | 6 |  |
| Surgery/Spint2 |  |  |  |  |  |  |
| Yes | 168 | 94% | 123 | 98% | 45 | 87% |
| No | 10 | 6% | 3 | 2% | 7 | 14% |
| Unknown | 91 |  | 54 |  | 37 |  |
| Family history of clubfoot |  |  |  |  |  |  |
| Yes | 22 | 9% | 14 | 9% | 8 | 11% |
| No | 216 | 91% | 148 | 91% | 68 | 89% |
| Unknown | 48 |  | 24 |  | 20 |  |

1 registries in Hainault and Strasbourg not included

2Among livebirth