

Documents

Dhondt, E.^a , Dan, B.^{b c} , Plasschaert, F.^{d e} , Degelaen, M.^{b f} , Dielman, C.^g , Dispa, D.^h , Ebetiuc, I.ⁱ , Hasaerts, D.^j , Kenis, S.^k , Lombardo, C.^l , Pelc, K.^b , Wermenbol, V.^m , Ortibus, E.^{a n} , Belgian Cerebral Palsy Register^o

Prevalence of cerebral palsy and factors associated with cerebral palsy subtype: A population-based study in Belgium
(2023) *European Journal of Paediatric Neurology*, 46, pp. 8-23. Cited 2 times.

DOI: 10.1016/j.ejpn.2023.06.003

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Abstract
Aim: To report on the prevalence, neuroimaging patterns, and function of children with cerebral palsy (CP) in Belgium for birth years 2007–2012, and identify distinctive risk indicators and differences in outcome between CP subtypes. Methods: Antenatal and perinatal/neonatal factors, motor and speech function, associated impairments, and neuroimaging patterns were extracted from the Belgian Cerebral Palsy Register. Prevalence was estimated per 1000 (overall, ante/perinatal, spastic, dyskinetic CP) or 10,000 (post-neonatal, ataxic CP) live births. Multinomial logistic regression analyses were performed to ascertain the effects of antenatal/perinatal/neonatal factors and neuroimaging patterns on the likelihood of dyskinetic or ataxic CP relative to spastic CP, and test the likelihood of the occurrence of impaired motor and speech function and associated impairments in dyskinetic or ataxic CP relative to spastic CP. Results: In total, 1127 children with CP were identified in Belgium. The birth prevalence of overall CP was 1.48 per 1000 live births. The likelihood of dyskinetic CP increases if the child was born to a mother aged ≥35 years, mechanically ventilated, and had predominant grey matter injury, while an increased likelihood of ataxic CP is associated with ≥2 previous deliveries. Children with dyskinetic and ataxic CP are more likely to function with impairments in motor, speech, and intellectual abilities. Conclusion: Distinctive risk indicators and differences in outcome between CP subtypes were identified. These factors can be incorporated into clinical practice to facilitate early, accurate, and reliable classification of CP subtype, and may lead to individually tailored neonatal care and other (early) intervention options. © 2023 European Paediatric Neurology Society

Author Keywords
Ataxia; Cerebral palsy; Dyskinesia; Magnetic resonance imaging; Prevalence; Spasticity

Index Keywords
Article, ataxia, Belgium, cerebral palsy, clinical practice, dyskinesia, female, gray matter, Gross Motor Function Classification System, human, infant, intelligence, live birth, major clinical study, male, motor dysfunction, motor performance, neuroimaging, newborn care, nuclear magnetic resonance imaging, obstetric delivery, perinatal period, prenatal period, prevalence, risk assessment, spasticity, speech disorder

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Publisher: W.B. Saunders Ltd

ISSN: 10903798
CODEN: EJPNF
PubMed ID: 37364404
Language of Original Document: English
Abbreviated Source Title: Eur. J. Paediatr. Neurol.
2-s2.0-85163016116
Document Type: Article
Publication Stage: Final
Source: Scopus