

## FP23

### **Neural tube defects over the years – An Irish perspective**

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Neural tube defects (NTD) are among the commonest congenital defects of the central nervous system. Surviving patients often face multiple morbidity and require ongoing multidisciplinary input throughout their lives. In the USA NTD affect 1 in 3000 pregnancies with a live birth rate of 3.5 cases/10000 births. The European figures reveal a 7.9 cases/ 10000 pregnancies. There is no centralised database for NTD in Ireland, with three separate registries reporting to EUROCAT. This makes it difficult to determine the exact impact of these defects on the Irish health system.

Since 2008 our centre became the national centre for Paediatric Neurosurgery. As a result babies born with NTD are usually referred to our service. On examining our practice we have found between 24-45 new cases per year with a majority of myelomeningoceles approx. 70% of NTD. The majority are children of Irish parentage despite migration patterns over last 5 years showing increased immigration from Eastern Europe and Africa. Our shunt rate for these is 77% with 24% infection rate.

Given the high prevalence of neural tube defects in Ireland we are currently in the process of conducting a genetic study of our patient population with the aim of running microarray Comparative Genomic Hybridisation to determine copy number variables. That may lead to the identification of causative genes in our population.