November 2020 ORIGINAL ARTICLES

- 52. Volpe JJ. Brain injury in premature infants: a complex amalgam of destructive and developmental disturbances. Lancet Neurol 2009;8:110-24.
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50 Years Ago in The Journal of Pediatrics

Wolf-Hirschorn Versus Cri-du-Chat Syndrome

Miller OJ, Breg WR, Warburton D, Miller DA, DeCapoa A, Allerdice PW, et al. Partial Deletion of the Short Arm of Chromosome No 4(4p-): Clinical Studies in Five unrelated Patients. J Pediatr 1970;77:792-801.

The Wolf-Hirschorn syndrome was described in 1961 and 1965 as the first human chromosome deletion syndrome, with a deletion of the short arm of chromosome number 4 (4p) and recently discussed by us. ^{1,2} The Cri du Chat syndrome was described in 1963, with a deletion of the short arm of chromosome 5.

There are overlapping characteristics between the two syndromes, thus in *The Journal* 50 years ago Miller et al present 5 genetically confirmed cases of Wolf-Hirschorn syndrome, listing the features that distinguish this from Cri du Chat syndrome. Although they refrain from using the term Wolf-Hirschorn syndrome in their article, they are describing the clinical and genetic findings typical for this syndrome. Wolf-Hirschorn syndrome presents with characteristic facies, lower birthweight than Cri du Chat syndrome, more severe psychomotor retardation, more frequent genital anomalies, preauricular and sacral dimples, hypoplastic dermal ridges on the palms and the feet, and the lack of the characteristic cry heard in patients with Cri du Chat syndrome. Shared features are hypotonia, microcephaly, hypertelorism, epicanthus, low-set ears, micrognathia, high-arched palate, heart defects, foot deformities, and simian crease. Cri du Chat syndrome is slightly more common than Wolf-Hirschorn syndrome, but both syndromes are very rare (1:15 000-50 000 vs 1:50 000). The exact site for the genetic lesion has been mapped to 4p16.3 in Wolf-Hirschorn syndrome, and in Cri du Chat syndrome the lesion can vary from just 5p15.2 to the entire short arm (OMIM).

This report was important at the time of publication due to the differentiation of the 2 syndromes, which cannot always be easily done clinically. Today the situation is very different; an extensive genetic testing when suspecting a syndrome gives quick and accurate results. Miller et al highlight the differences between Wolf-Hirschorn syndrome and Cri du Chat syndrome, and the extensive progress that has been made in genetic testing in the last 50 years.

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