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Neonatal Withdrawal Syndrome, Management Difficulties: About Two Cases

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Introduction

The common use of prescription opioids is increasing to treat chronic pain (1). Approximately 80% of new heroin users have engaged in illicit opioid use (2,3,4). In utero exposure to opioids manifests as neonatal abstinence syndrome (NNAS) at birth in 60 to 95% of cases.
There are several evaluation scales. The most commonly used screening tool is the Finnegan Neonatal Abstinence Scoring System (5,6). The Lipsitz Neonatal Drug Withdrawal Scoring System is another commonly used and simpler screening assessment (7). Currently, there is no evidence of superiority of an assessment tool comparing to another (8). They help to list clinical signs, assess severity, and monitor progress to adapt the therapeutic attitude.
We don't have prevalence studies to estimate both the frequency of this scourge and its therapeutic management in Algeria . We reported two cases of neonatal weaning, highlighting the difficulties of anticipating this syndrome and establishing an optimal treatment protocol with locally available therapeutic alternatives.

Cases reports:

Observation No. 1

female newborn, first child of a young non-consanguineous couple, born at term vaginal delivery admitted a few hours after birth for agitation with hyperexcitability. On 3rd day of life, generalized convulsions occurred that don't respond to usual anticonvulsants. The questioning reveals the notion of medication by a level II analgesic (weak opiate) such as TRAMADOL Cp 50 mg (8 to 10 Cp/day) throughout the pregnancy. The clinical examination didn't reveal any other signs. The diagnosis of NNAS with opiates was made and its severity was estimated by the Finnegan score ≥ 8 at 3 successive evaluations .that motivated the initiation of treatment based on IV Morphine at a rate of 0.04 mg/Kg/6 hours with measurements of support and nursing.

The evolution towards stabilization allowed a gradual reduction in doses. The total length of hospitalization was 27 days. Carried out, he was entrusted to the consultation for follow-up with psychological support from the parents by directing the mother to a center to deal with her addiction.

Observation No. 2

Male newborn, full-term birth by C-section delivery, admitted at 36 hours of life for irritability with tremors. The questioning revealed the notion of poly-uptakes during pregnancy associating PREGABALINE and HEROIN. The clinical examination revealed a disturbed neurological examination (hypertonia, hyperexcitability, tremors, excessive sucking). The diagnosis of opioid NNAS was made and was confirmed by blood and urine testing of the mother and newborn after consent.

Its severity estimated by the Finnegan score ≥ 12 at 2 evaluations motivated the initiation of treatment based on IV Morphine at a rate of 0.02 mg/Kg/6 hours then IVL over 24 hours; associated with support and nursing measures.

The evolution towards stabilization was allowed a gradual reduction in doses. The total length of hospitalization was 15 days. Carried out, he was entrusted to social assistance with a consultation appointment for follow-up.

Discussion

Compared to what has been reported in the literature. The first case presented a state of agitation with hyperexcitability, subsequently followed by generalized seizures not responding to usual anticonvulsants. The second newborn was presented neurological signs such as hypertonia, hyperexcitability, tremors, and excessive sucking. The symptomatology that we reported in these two cases is consistent with that described in the literature (9,10,11), including hyperactivity of the central nervous system, dysfunction of the autonomic nervous system and gastrointestinal problems. These symptoms begin

24 to 72 hours after birth. Oral Morphine every 6 hours is the first-line treatment in the event of nursing failure. Its non-availability in our structures represented the main difficulty in our treatment and the protocol was readjusted parenterally, first discontinuously then continuously over 24 hours.

Conclusion

NNAS is a problem that is growing with the increasing prevalence of opioid use. Its management should be codified by pre-established protocols adapted to the local conditions of each maternity and neonatology department, involving specialized interprofessional skills (pediatrician, childcare worker, pharmacist, social assistance, etc.). Finally, insist on raising awareness during pregnancy, on NNAS for better antenatal anticipation; and preserve as much as possible parental involvement and social support for optimal care of these children

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