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Letter to the Editor

Atosiban dosing in preterm labour-made easy for all

Sir,

Preterm labour remains a significant contributor to neonatal morbidity and mortality, particularly in low-resource settings where timely and appropriate interventions may be challenging. Tocolysis plays an important role in delaying delivery and facilitating antenatal corticosteroid administration. Among available agents, Atosiban, a selective oxytocin receptor antagonist, is widely used due to its favorable safety profile and targeted mechanism of action.[1]

Despite its advantages, the dosing regimen of Atosiban is often perceived as complex and difficult to interpret, especially by healthcare providers in busy labour wards and resource-limited settings. This may lead to incorrect or inadequate dosing, thereby reducing its effectiveness. We propose a simplified and practical approach to Atosiban administration to improve ease of use and compliance among clinicians and nursing staff. To the best of our knowledge, this is one of the first simplified, calculation-free, bedside dosing protocols for atosiban specifically designed for low-resource and high-volume clinical settings. The loading dose remains uniform, consisting of a single vial of 6.75 mg administered intravenously over 1-5 minutes. This is followed by maintenance infusion using an infusion pump. For standard dosing, 1.5 vials of 37.5 mg each may be diluted in 500 ml normal saline and administered at a rate of 160 ml per hour for the initial 3 hours, corresponding to 300 mcg/min. This may then be followed by a reduced rate of 54 ml per hour for the next 9 hours, delivering 100 mcg/min. This regimen utilizes a total of three vials over a 12-hour period. If further maintenance is required, one vial of 37.5 mg may be diluted in 500 ml normal saline and administered at 80 ml per hour, with each vial lasting approximately 6 hours.[2]

In fluid-restricted patients, a more concentrated regimen may be used, wherein two vials of 37.5 mg are diluted in 100 ml normal saline and administered at 24 ml per hour for 3 hours, followed by 8 ml per hour for 9 hours, maintaining equivalent dosing rates. Additionally, in situations where procurement of multiple vials is delayed, a temporary regimen using a single vial diluted in 500 ml normal saline at 240 ml per hour for the initial phase, followed by 80 ml per hour, may be used as a bridging strategy until further doses are available.[3-8]

By simplifying the dosing regimen into easily implementable protocols, we aim to enhance the acceptability and correct use of Atosiban in clinical practice. Such standardization may reduce dosing errors, improve confidence among healthcare providers, and ultimately lead to better outcomes in the management of preterm labour. Wider adoption of this simplified protocol has the potential to reduce dosing errors, improve clinician confidence, and enhance maternal-fetal outcomes in the management of preterm labour.

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