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Study Summary

Phenobarbital and Clonidine as Secondary Medications for Neonatal Opioid Withdrawal Syndrome

Author(s): Stephanie Merhar, Songthip Ounpraseuth, Lori Devlin, et al.

Why was this study conducted?

Babies exposed to opioids (e.g., morphine, methadone, etc.) in the womb may have drug withdrawal symptoms called neonatal opioid withdrawal syndrome (NOWS) after birth. Some are given medicine for their symptoms. If the medicine doesn't work, doctors may add other (secondary) medicine to the treatment. This study looked at two secondary drugs used most often to see if one was better than the other in NOWS treatment.

What was done?

We reviewed medical records from 30 U.S. hospitals. There were 180 babies with NOWS treated with morphine (M) and a secondary drug [phenobarbital (P) or clonidine (C)]. We compared the two groups (M + P and M + C) and calculated the number of days spent in the hospital and the number of days they received morphine.

What was found?

Babies in the M + P group had fewer days of morphine treatment compared to babies in the M + C group. They also spent fewer days in the hospital than the M + C group. However, babies in the M + P group were more likely to continue taking phenobarbital at home.

What do the results mean?

In this study, babies treated with M + P had shorter hospital stays, and in some cases, fewer days of morphine treatment. But, some studies show that long-term use of phenobarbital could cause problems with the development of the nervous system. More research is needed on the benefits and risks of using this drug to treat NOWS symptoms.

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Learn more about this publication here.