

## BACKGROUND

HDN is a rare potentially fatal disorder which presents with spontaneous bleeding/bruising or intracranial haemorrhage. It is associated with prolonged clotting times. Three types of HDN are recognised:

**Early:** in the 48 hours of life, almost always related to maternal drug therapy eg phenytoin.

**Classical:** 2<sup>nd</sup> to 7<sup>th</sup> day of life.

**Late:** occurring between one week and six months of age

In Australia, vitamin K prophylaxis is given routinely to almost all newborn infants to prevent HDN. In most cases it has been given intramuscularly. Recent studies suggesting an association between intramuscular vitamin K and childhood malignancy lead an expert panel Of the NH&MRC, ACP, and RACOG to recommend that:

- All healthy full term infants could receive three oral doses of vitamin K, instead of a single intramuscular dose at birth. The oral doses should be given at day 0, at 3-5 days and in the fourth week of life.
- Infants who are pre-term, unwell or unable to tolerate or absorb vitamin K should receive 0.1-mg intramuscular vitamin K at birth. The mode of administration of the subsequent doses will depend on the condition of the infant.

## STUDY OBJECTIVES

To provide a mechanism for the national epidemiological surveillance of HDN, determine the morbidity and mortality associated with HDN, and evaluate the efficacy of vitamin K prophylaxis.

## CASE DEFINITION AND REPORTING INSTRUCTIONS

This study provides a mechanism for the National epidemiological surveillance of HDN. It allows the effectiveness of various vitamin K regimes to be assessed and the morbidity and mortality associated with HDN to be quantified.

**Case Definition:** *Any infant under 6 months of age with spontaneous bruising/bleeding or intracranial haemorrhage associated with prolonged clotting time, not due to an inherited coagulopathy or disseminated intravascular coagulation.*

### Reporting instructions:

**Initial:** Please report any definite or probable cases of HDN seen since January 1<sup>st</sup> 1993, that satisfy the clinical case definition above.

**Subsequent:** Please report any definite or probable cases of HDN seen during the preceding month that satisfy the clinical case definition above.

**Follow-up of positive returns:** A questionnaire requesting further details will be forwarded to the practitioners who report a case. A follow-up questionnaire will be sent 12 months later

**Investigators:** Associate Professor Bin Jalaludin (Chief\*)  
School of Public Health and Community Medicine, University of New South Wales and Deputy Director, Epidemiology Unit South Western Sydney Area Health Service.

**Contact Address:** Sydney South West Area Health Service  
Public Health Unit  
Locked Bag 7017, Liverpool BC NSW 1871  
Phone (02) 9828 6002