Ballarat Health Services CPP0204 – Breastmilk – Incorrect Breastmilk Administered to a Baby

Appendix 1: Information about infections and breastmilk.

Covid-19

Limited studies to date have not detected coronavirus in breastmilk. Covid-19 infection is not a contraindication to breastfeeding.

There are no safety concerns related to Covid-19 vaccination and breastfeeding/breastmilk. Antibodies induced by Covid-19 vaccines pass into breastmilk and may provide some protection against Covid-19.

Hepatitis B (HBV)

There is no evidence that breastmilk is a significant source of transmission of Hepatitis B virus and therefore HBV infection in the mother is not a contraindication to breastfeeding.

If the mother has an active HBV infection ((HBeAg positive or acute infection), the baby should receive Hepatitis B immunoglobulin (HBIG) within an hour of birth followed HBV vaccine at birth, 2,4 and 6 months of age.

Hepatitis C (HCV)

There is no evidence that breastmilk is a significant source of transmission of Hepatitis C virus, and therefore HCV infection in the mother is not a contraindication to breastfeeding.

However as a precaution, if the mother has cracked or bleeding nipples, it is recommended that the mother expresses and discards her milk until the nipples have healed. The baby will need to be fed an alternative such as infant formula and the mother will need to express frequently with a suitable breastpump during this time to maintain milk supply.

Human Immunodeficiency Virus (HIV)

Breastfeeding is contraindicated if the mother is HIV positive and there are safe and available infant feeding alternatives.

If there is a high risk that the source mother is HIV positive, retroviral prophylaxis should be commenced within 1-4 hours of the exposure event. Consult with an ID physician urgently if:

- Source mother is known to be HIV positive

- Source mother is likely to be in a window period for HIV infection
- Source is likely to be positive for HIV
- Delay in obtaining serology results is anticipated

Decisions regarding appropriate prophylactic treatment should only be made in consultation with an infectious diseases physician

Cytomegalovirus.

Cytomegalovirus can be transmitted between mother and baby in utero and via breastmilk. However CMV transmission generally does not pose a risk of illness in well, term infants. Most infected infants are asymptomatic and remain well.

In Australia, antenatal screening for cytomegalovirus is not routine. However in the event of incorrect breastmilk being fed to a baby, both the source and birth mother should be screened for CMV, particularly if the baby is in in an 'at risk' group. Babies at risk of illness from primary CMV infection during the neonatal period include:

- Very preterm babies (<32 weeks gestation)
- Immunocompromised babies
- Seronegative mother

If the source mother is positive and the birth mother negative for CMV, the baby will require monitoring by a health professional to observe for symptoms of clinical disease and managed accordingly.

Human T-cell Lymphotropic Virus I/II (HTLV I/II)

HTLV is an oncogenic virus of the family *Oncovirinae* which may be transmitted from mother to baby in-utero, and via breastmilk. It is associated with the following conditions:

- Adult T-cell Leukaemia/Lymphoma,
- Tropical Spastic Paraparesis,
- HTLV -1 associated Myelopathy
- Other neurological illnesses.

In Australia, antenatal screening for HTLV I/II is not routine, however if either the birth or source mother comes from a high risk group, screening of both is recommended in the event of incorrect breastmilk being fed to a baby.

If either the birth or source mother screens as positive for HTLV I/II, referral should be made to an Infectious Disease Specialist of all parties – birth mother, baby and source mother.

Human T-cell Lymphotropic Virus I

Between 10 - 20 million people are infected worldwide. It is endemic in the following areas:

- Japan
- The Caribbean
- Central and Southern Africa
- South America (Brazil)

- Iran
- Iraq
- Papua new Guinea
- India
- China
- Malaysia

Non- endemic areas include

- Europe
- UK
- USA
- Australia – although there is a higher prevalence in the Aboriginal population of the Northern Territory.

Human T-cell Lymphotropic Virus II

Is associated with T-cell hairy cell leukaemia and Tropical Spastic paraparesis / neuropathy.

HTLV II is endemic in Africa and South America and in IV drug users.

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