Case Study: Infections & Breastfeeding

Breastfeeding Curriculum, updated 2021

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Infections & Breastfeeding Case

Case: Andi is a 32 year old G2P2 who sees you for a virtual visit for **cough and fever**. She is tandem nursing her 6-month-old and 3-year-old children. Both children were born at term, are healthy and currently not exhibiting any acute symptoms.
Infections & Breastfeeding Case Question #1

You decide that Andi needs to be tested for both influenza and COVID-19. While these tests are pending or if either are positive, does Andi need to stop breastfeeding her children?

a. Yes, she needs to be quarantined away from her children and any milk that she produces during this time needs to be pumped and dumped.
b. Yes, she needs to be quarantined from her children but can pump and have someone else feed the children expressed milk.
c. Yes, but only if she tests positive for COVID. Then she needs to be quarantined but she can pump and have someone else feed the children the expressed milk.
d. No, Andi does not need to stop breastfeeding her children nor does she need to quarantine. She should engage in respiratory hygiene (wear a mask) and hand hygiene (hand washing and/or hand sanitizer).
e. No, no precautions need to be taken at all.
Infections & Breastfeeding Case Question #1 Answer

Answer: D Andi does not need to stop breastfeeding her children nor does she need to quarantine. Explanation below:

Both influenza and COVID-19 can be spread by close, personal contact. Breastmilk itself does not spread either of these infections but close proximity can. ABM, CDC, ACOG and AAP all agree that separating a mother and child is not necessary as long as appropriate precautions can be taken (wearing a mask, washing hands regularly, etc).
Infections & Breastfeeding Case Question #2

Andi is relieved that there are ways to keep her children safe and maintain a breastfeeding relationship. She asks if vaccination would be helpful for her and/or her children.

a. Yes. She would be eligible for both influenza and COVID vaccinations.
b. Vaccinations can be given but only provide Andi with protection and offer no benefit to her children.
c. Influenza vaccination can be given while breastfeeding, but she would need to either pump and dump or stop breastfeeding in order to receive the COVID-19 vaccination.
d. She can receive the vaccinations but her children would need to receive the vaccination at the same time in order for it to be safe.
e. No, both vaccinations are contraindicated during lactation.
Infections & Breastfeeding Case Question #2 Answer

Answer: A

a. **Influenza vaccination is a safe and a recommended vaccination during lactation (L1 safety rating).** If she is significantly ill, vaccination would not be recommended until she is in better health. The COVID-19 vaccination did not include lactating patients in initial studies but the FDA did include pregnant and lactating women in the Emergency Use Authorization approval. Per the Academy of Breastfeeding Medicine, “there is little biological plausibility that the vaccine will cause harm, and antibodies to SARS-CoV-2 in milk may protect the breastfeeding child.”

b. Antibodies produced by the lactating parent who receives the vaccination can pass through the breastmilk to the infant. While the amount of protection offered through breastmilk is not as great as receiving a vaccine directly, there may be some benefit. Additionally if a parent has a lower chance of getting an infection, they thus would have a lower chance of spreading that infection to their child. Additionally, BOTH of her children are now old enough to receive the influenza vaccination themselves.

c. No vaccinations require pump and dump. The only vaccinations that require special treatment during lactation are smallpox and yellow fever.

d. **Only yellow fever vaccination requires either that a lactating parent pause lactation or that the infant receive their own vaccination concurrently.** Neither influenza nor COVID-19 vaccinations have this requirement.

e. The influenza vaccination is an L1. The COVID-19 vaccination has had limited studies to date but is supported in lactation by the Academy of Breastfeeding Medicine, CDC, and the AAP. Neither are contraindicated during lactation.
Infections & Breastfeeding Case Question #3

Andi states that she has a friend who was told not to breastfeed due to a chronic infection. She asks if there are any infections that require a parent not to breastfeed. Which of the following is true?

a. CMV is always a contraindication to breastfeeding and should be screened for before an asymptomatic mother begins breastfeeding.
b. Tuberculosis is present in breastmilk and therefore is a contraindication to breastfeeding.
c. A history of HSV is a contraindication to breastfeeding.
d. HIV and Hep C might be contraindications to breastfeeding.
e. There are no infectious contraindications to breastfeeding.
Infections & Breastfeeding Case Question #3 Answer

Answer: D

a. Active CMV infection for very premature infants may be a cause for concern. If the milk is pasteurized or the infant is healthy and term, this is rarely a concern and does not require universal screening.

b. Tuberculosis does not pass through the milk but is airborne. Mothers with active TB infection should be separated from their infants or utilize aggressive respiratory precautions. Expressed milk is safe for infant consumption.

c. Active HSV with nipple lesions is a contraindication to breastfeeding from that breast. Non-active HSV or HSV located in a non-nipple location that can be appropriately covered while breastfeeding is not a contraindication to breastfeeding as long as covering active lesions occurs and appropriate hygiene is maintained.

d. HIV is considered a contraindication to breastfeeding in developed countries. Sometimes HIV positive individuals will breastfeed when safe water supply is not available. Hepatitis C is a contraindication to breastfeeding only when the nipples are cracked or bleeding.

e. HIV in a developed country, hepatitis C when nipples are cracked/bleeding, HTLV, Ebola, brucellosis, HSV with active nipple lesions and CMV in the setting of prematurity are contraindication to breastfeeding.
Infections & Breastfeeding Cases References

- Red Book: 2021 Report of the Committee on Infectious Diseases, 32nd Edition Editor: David W. Kimberlin, MD, FAAP; Associate Editors: Elizabeth D. Barnett, MD, FAAP; Ruth Lynfield, MD, FAAP; and Mark H. Sawyer, MD, FAAP
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