‘The only thing I know is that I know nothing’: 5-fluorouracil in human milk

Women are usually advised to interrupt breastfeeding during chemotherapy for concerns of serious side-effects to the infant. However, the passage of cytotoxic drugs in human milk has been poorly studied.

A 36-year-old woman was diagnosed with rectal cancer while she was still breastfeeding her 9-month-old son. The tumor was staged as cT3N1M0 and neoadjuvant 5-flourouracil (5-FU)-based chemoradiotherapy (CRT) was planned. She was advised to stop nursing, however, she expressed her desire to resume breastfeeding after treatment.
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disclosure

The authors declare no conflict of interest.

references


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Figure 1. HPLC assay for 5-fluorouracil (5-FU). (A) Representative HPLC-UV chromatograph of 5-FU and chlorouracil (CIU, used as internal standard) profiles in a plasma sample (note: the numbers near the 5-FU and CIU peaks refer to their specific retention times). (B) Plot of the HPLC-determined concentration of plasma 5-FU. (C) Representative HPLC-UV chromatograph of 5-FU and CIU (used as internal standard) profiles in 5-FU-spiked milk samples from a healthy donor. (D) Calibration curve of 5-FU (0.5, 1, 2.5, 5 and 10 μM) obtained in 5-FU-spiked milk from a healthy donor.