Clindamycin in human breast milk

To the editor: It is well recognized that antimicrobials administered to nursing mothers may be secreted in human milk.[1] This phenomenon has obvious potential repercussions on the breast-fed infant: (a) development of allergy to the antimicrobial being secreted, (b) antagonistic effects upon antimicrobial treatment the infant may be receiving, (c) accumulation of toxic blood concentrations if the infant is already receiving treatment with the same antimicrobial and (d) colonization of the bowel. We report two cases of the secretion of clindamycin in human breast milk.

Two nursing mothers who were receiving treatment with clindamycin for infection with *Bacteroides* sp. were monitored for concentration of clindamycin in their breast milk.

Clindamycin assay was performed by the plate assay method, using a β-hemolytic streptococcus as the indicator organism. Breast milk from a patient who was not receiving an antimicrobial did not show bacterial inhibition in the test system employed. It is assumed, therefore, that zones of bacterial inhibition seen in the test reflect the presence of clindamycin, although we concede that because of our very limited experience with the test we cannot vouch for the accuracy of the assay. It is of interest, however, that the concentrations recorded in Table I correlate with dosage and route of administration. The highest values (2.13 to 3.8 μg/ml) were observed when the two patients were receiving 600 mg intravenously *q6h*; at a dosage of 300 mg orally *q6h* the highest value was 1.8 μg/ml.

We draw attention to this phenomenon to emphasize that when nursing mothers receive antimicrobials there are potential risks to the breast-fed babies.

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Table I—Relationship between administration of clindamycin and concentration in breast milk

	Clindamycin dosage and route	Time of breast milk sample after drug (h)	Clindamycin blood concentration (μg/ml)
Patient A	600 mg IV *q6h*	3.5	2.65
		1.5	2.13
		0.2	3.8
	300 mg orally *q6h*	7	1.0
		4	1.3
		2	1.0
		3.5	1.3
		5.5	0.77
		4	1.0
		? (not recorded)	0.9
		? (not recorded)	0.74
Patient B	600 mg IV *q6h*	0.5	3.1
		2	2.8
	300 mg orally *q6h*	1.5	1.6
		3	1.7
		2	1.8
		2.5	1.7
Control (patient not receiving antimicrobial)		—	0

References

1. CATZ SC, GIACOIA GP: Drugs and breast milk. *Pediatr Clin North Am* 19: 151, 1972
2. KNOWLES JA: Excretion of drugs in milk — a review. *J Pediatr* 66: 1068, 1965

Search for Bethune instruments

To the editor: I am acting as historical consultant to Parks Canada, a division of the Department of Indian and Northern Affairs of the Canadian government. My task is to give advice on the restoration of the natal home of Dr. Norman Bethune in Gravenhurst, Ont.

Part of the home will be given over to a display of Bethune's life and work. It is hoped that some of his several thoracic surgical instruments can be located for display. These must be located and I would like to draw this to the attention of anyone who may possess a Bethune instrument in the hope that the owner will consider donating it to the Bethune home.

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Research in birth defects

To the editor: The National Foundation–March of Dimes will entertain a limited number of research proposals for the support of basic and clinical research in birth defects. The National Foundation defines a birth defect as an abnormality of structure, function or metabolism, whether genetically determined or a result of environmental interference during embryonic or fetal life. Requests dealing with the structure and function of chromosomes, their subunits, genes, supporting structures, repressor substances and the like will be encouraged.

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