The Effectiveness of Washing Clothing Contaminated With Cyclophosphamide: A Pilot Study

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BACKGROUND: Measures to prevent exposure to anticancer drugs mitigate health hazards for caregivers, family members, and healthcare workers caring for patients with cancer. Previous studies have reported that anticancer drugs were detected on the linens of patients receiving chemotherapy.

OBJECTIVES: This pilot study investigated the effectiveness of the washing methods recommended by Japanese guidelines for linens contaminated with cyclophosphamide (CTX).

METHODS: This study used 15 shirts contaminated with 10 mg of CTX divided into three study groups washed with or without detergent, with or without an additional clean shirt. The CTX level on each shirt was measured after washing. Residual CTX levels on the shirts were compared to the measurable level of 1 ng/cm² as a criterion for evaluating efficacy.

FINDINGS: Washing a garment twice, as recommended in the Japanese guidelines, is effective in removing CTX contamination from clothing with or without detergent. However, contaminated garments should be washed separately from uncontaminated clothing.

KEYWORDS
antineoplastic agents; body secretions; contaminated linens; washing methods

DIGITAL OBJECT IDENTIFIER
10.1188/23.CJON.289-294