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## Pseudoinfection Due to Mislabeling

To the Editor—Pseudoinfections and pseudooutbreaks are mainly caused by transfer of organisms between patient specimens (cross-contamination) and by contamination of patient specimens with environmental organisms.<sup>1,2</sup> Other causes are clinical misdiagnosis and surveillance artifacts.<sup>2-4</sup> The following example shows that further causes must be considered.

Salmonella enterica serovar Hadar was isolated on the same day from a stool specimen of patient A and from an intestinal biopsy specimen of patient B. The patients were hospitalized in the same hospital but in different wards. An investigation was prompted, revealing that the patients had gone to the endoscopy suite concurrently on the day of specimen collection. An ileocoloscopy had been performed on patient A, including collection of mucosal biopsy specimens, whereas patient B had undergone gastroscopy without biopsy. No specimens at all had been collected from patient B that day to be sent to the microbiology laboratory. A stool specimen had been collected for microbiological examination from patient A, before patient A went to the endoscopy suite that day. Patient B did not show clinical signs of salmonellosis, and a pseudoinfection was suspected. However, the pseudoinfection obviously could not have been caused by specimen contamination or cross-contamination. Observations of the work flow within the endoscopy suite led us to conclude

that specimen mislabeling was the most likely cause of the pseudoinfection. The charts of the 2 patients had been deposited on the same desk. When the biopsy specimen was taken to the desk to be marked with a patient label, a label of patient B was erroneously used for the biopsy specimen of patient A.

As in other cases published, this case of a pseudoinfection was noticed because of the unusual pathogen involved. Coincidentally, no biopsy specimen had been obtained from patient B on the day of specimen collection. If this had not been the case, the pseudoinfection would not have been noticed at all, or cross-contamination would have been regarded as the most likely cause of pseudoinfection, leading to a costly analysis of endoscope processing as well as of each step in specimen collection and processing.<sup>1,3</sup> Taking into account frequent errors in daily routine work, we hypothesize that pseudoinfection due to mislabeling of specimens is not an infrequent event.

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