Ceftriaxone-induced Biliary Sludge in a Patient with Uncontrolled Diabetes

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Key words: biliary stone, ceftriaxone, diabetes mellitus, pseudolithiasis

(A) On admission
(B) After 18 days
(C) After 18 days

A 66-year-old man with uncontrolled diabetes mellitus (HbA1c: 14.4%) received 4 g per day of ceftriaxone for invasive pneumococcal disease. After 18 days, computed tomography incidentally showed newly formed biliary sludge in the gallbladder (Picture A, B); these findings were subsequently confirmed on ultrasonography (Picture C). Under a diagnosis of ceftriaxone-induced pseudolithiasis, the drug was discontinued. Ceftriaxone binds with calcium ions and forms insoluble biliary sludge in the gallbladder. This process usually takes a few days to a few weeks after the initiation of ceftriaxone therapy (1). The administration of a high daily dose (over 2 g per day) and a prolonged treatment period are considered to be risk factors for this condition (2). The major causative

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factors in the present case were assumed to be deteriorated
gallbladder contractions resulting from neuropathy due to
poorly controlled diabetes and the high dose of ceftriaxone.
Routine follow-up to monitor for biliary sludge is necessary
in patients receiving ceftriaxone.

The authors state that they have no Conflict of Interest (COI).

References

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