

Notes from the Field

A Case of Psittacosis — Putian City, Fujian Province, China, April 2025

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On April 25, 2025, a case of psittacosis was identified in Putian City, Fujian Province. The patient was a 72-year-old female farmer who developed symptoms on April 1, 2025. Her primary clinical manifestations included cough, expectoration, dizziness, and shortness of breath. On April 3, 2025, the patient's condition deteriorated and was accompanied by fever peaking at 39.3 °C. She received symptomatic treatment at a county hospital. Due to further deterioration of her condition on April 5, 2025, she was transferred to a municipal hospital and admitted to the Emergency Intensive Care Unit (EICU) with severe pneumonia. During hospitalization, she received anti-infection treatment with doxycycline and moxifloxacin. By April 25, 2025, the patient's symptoms had improved significantly, and she was subsequently discharged from the hospital.

The patient had constructed a poultry enclosure adjacent to her newly built residence, housing eight chickens and ducks. She maintained daily contact with these birds without implementing protective measures and had no history of slaughtering poultry. Given her frequent and prolonged exposure to the birds combined with limited travel outside her home, infection through inhalation of aerosolized particles from contaminated poultry excreta represented the most probable transmission route. Notably, despite similar poultry contact, the patient's family members remained asymptomatic throughout the investigation period.

Chlamydia psittaci (*C. psittaci*) was identified in the patient's alveolar lavage fluid through targeted next-generation sequencing (NGS) testing for respiratory pathogens on April 11, 2025. Concurrently, the major outer membrane protein A (ompA) gene of *C. psittaci* was detected in both poultry feces and cage wipe specimens using real-time PCR and nested PCR (1). Sequence analysis revealed that the *C. psittaci* genes detected from the poultry feces and cage wipe specimens were identical to those identified in the patient, demonstrating 100% homology with a strain previously isolated from a patient in Shandong

Province (accession number MZ345290) (1).

Psittacosis is a zoonotic disease caused by *C. psittaci* (2). Human infection typically occurs through direct contact with infected poultry or birds, as well as exposure to their contaminated feces or secretions (3). An increasing number of psittacosis cases have been documented worldwide (3–5), highlighting the growing recognition of this pathogen's clinical significance. Nevertheless, *C. psittaci* pneumonia accounts for only approximately 1.03% of community-acquired pneumonia cases (6), suggesting that numerous psittacosis infections remain underdiagnosed or misdiagnosed in clinical practice. Consequently, for pneumonia cases of unknown etiology, comprehensive multi-pathogen screening and NGS testing should be systematically employed to improve diagnostic accuracy. A recent 2021–2022 study conducted in Fujian Province identified 74 psittacosis cases through NGS diagnostics (7). However, comprehensive epidemiological investigations and environmental traceability studies for these cases remain notably lacking, representing a significant gap in our understanding of transmission dynamics and environmental reservoirs.

This report documents the first detection and successful identification of *C. psittaci* from environmental samples in Putian City, establishing a valuable reference framework for investigating and managing future psittacosis cases. Upon receiving notification from the medical institution, the Public Health Department immediately coordinated with the Agricultural Department to implement comprehensive control measures. These included the safe disposal of all poultry, thorough disinfection of both the patient's residence and poultry housing facilities, and enhanced surveillance for suspected psittacosis cases throughout the surrounding village. Subsequent investigation revealed that all village poultry were maintained in appropriate housing conditions and displayed no clinical symptoms suggestive of infection.

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