Letter to Editor

# Comments on: Phenotypic and Molecular Identification of Nocardia in Brain Abscess

Sir,

Recently, we published a case report entitled, "Nocardial brain abscess in a patient with pulmonary alveolar proteinosis."[1] Pulmonary alveolar proteinosis, a disease of alveolar accumulation of phospholipoproteinaceous material, has been associated with nocardial brain abscess.[2]

Authors of the present letter reviewed the letter conducted by Fatahi-Bafghi entitled as "Phenotypic and molecular identification of nocardia in brain abscess."[3] *Nocardia* is a filamentous bacteria, branched Gram-positive *Bacilli*, aerobic, and partially acid-fast, and its diagnosis depends on staining and culture.[4] In this case, microscopic study of the brain abscess specimen revealed, long branching, filamentous, Gram-positive elements, suggestive of *Nocardia*. This agent was acid-fast positive, an important clue, which helped us to differentiate *Nocardia* from *Actinomyces*. This identification of *Nocardia* was further confirmed according to its typical and characteristic culture.

In the paper by Fatahi-Bafghi the author noticed that "phenotypic and molecular methods are necessary for accurate identification in species level of *Nocardia*;" however, traditional phenotypic characterization of this species is labor intensive, time-consuming and leads to misidentification; hence, the molecular methods are widely used for diagnosis, especially gene sequencing, particularly in identification of *Nocardia asteroids* and *farcinia* species, and have proven to be faster and more sensitive.[4,5] With the new molecular analyses, conventional methods are being replaced, and in our case, the laboratory identified the asteroides species with this method.

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### Conflicts of interest

There are no conflicts of interest.

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