

Editorial

Which method is more suitable for *Nocardia* isolation of polymicrobial sites?

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The genus *Nocardia* first described by Edmond Nocard. *Nocardia* species are Gram positive, partially acid fast, aerobic and non-motile. *Nocardia* spp are living in soil, dust, sand and degenerating vegetation [1,2]. The most common infection about *Nocardia* spp is pulmonary nocardiosis [1,3]. Isolation and identification *Nocardia* spp are important for ultimate diagnosis, predict antimicrobial susceptibility and epidemiological goals [3]. Prevalence of *Nocardia* infection in different regions is various [4]. Isolation of *Nocardia* spp are laborious that associated with low outbreak [4] and poly microbial specimens such as sputum is containing mixed flora (*Nocardia* spp are slow-growing bacteria) thus using of conventional media such as nutrient agar and sabouraud dextrose agar are inappropriate for *Nocardia* isolation [5,6]. Various methods have been described for *Nocardia* isolation of sputum that is including paraffin agar, paraffin baiting technique, Buffered Charcoal-Yeast Extract agar (containing anisomycin, polymyxin B and vancomycin or cefamandole), modified Thayer-Martin medium (containing vancomycin, colistin, nystatin) and conventional media [1,6-9]. The large number of reports, the use of paraffin baiting method is recommended [5,6,9,10]. *Nocardia* spp uses of paraffin wax as carbon sources [5]. This method is simple and inexpensive so is cheaper than other methods. Of this method was used for isolation Mycobacteria and *Nocardia* of soil [11]. This technique first introduced in 1936 by Gordon and Hagan [5]. This method is containing carbon-free broth (ZnSO₄, FeCl₃, MgSO₄·7H₂O, K₂HPO₄, NaNO₃, MnCl₂·4H₂O and distilled water) and glass rod that the coated with paraffin. *Nocardia* with white colonies grows on paraffin rod [5]. In conclusion, the use of this method for *Nocardia* isolation of sputum and various clinical specimens (poly microbial samples) are more appropriate.

Reference:

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