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 pulmonarynocardiosis [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 usch 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, FeC13, 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: