



INFECTIOUS DISEASES (BACTERIAL, FUNGAL, VIRAL, PARASITIC, INFESTATIONS)

PRIMARY CUTANEOUS NOCARDIOSIS A CASE SERIES OF CLINIC AND SPECIES DIVERSITY

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Introduction: *Nocardia* spp. is widely distributed as a saprophytic trait in ecosystem. Primary cutaneous nocardiosis is relatively rare.

Objective: We report a case series of primary cutaneous nocardiosis, and analysis clinical and species diversity.

Material and Methods: Case history and clinical manifestation were collected. Pus smear for gram stain, bacterial culture on a rabbit blood agar and fungal culture on Sabouraud's dextrose agar without antibiotics were carried out. The colonies were observed under dermoscopy, microscopy, and scanning electron microscopy. Molecular identifications were carried out by PCR amplify hsp65 (65-kDa heat-shock protein) gene and sequencing.

Results: Six cases were enrolled from 2013 to 2017: 1 male and 5 female, aged 28-87 years (mean 57.7 years). The lesions located on face (2), arms (2), leg (1) and acrotarsium (1); 4 cases consisted of triggering factors with wasp sting (1), possible spider bite (1), barefoot walking in sewage (1), and wash face with spring water (1); 3 cases were affected with diseases of diabetes (1), idiopathic thrombocytopenic purpura and hypertension (1) and SLE (1); 5 showed acute process from the onset to consultation as 5-12 days (mean 8 days) and 1 case showed subacute with 150 days. Four strains were identified as *N. brasiliensis* by sequencing. All of them were prescribed two tablets of trimethoprim-sulfamethoxazole, twice a day, and simultaneously took compound glycyrrhizin tablets to alleviate the symptoms of inflammation. The therapeutic course lasted from 20 to 111 days (mean 76.5 days), 6 patients were completely cured without any unwanted effects.

Conclusions: Elder, female, basic diseases along with possible skin micro-trauma can promote the nocardiosis onset. Acute painful nodule is one of the clinical features of this group. Trimethoprim-sulfamethoxazole is the first choice of extraordinary curative effect, whereas to the patients allergic to sulfa drugs, levofloxacin could be interchangeable.

