

Psychomotor dysfunction in Rasopathies

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Abstract

High concentrations of heavy metals (Cadmium, Arsenic, Chromium, Lead, Mercury, Copper, Cobalt, Zinc, Nickel, and Selenium) in soil are threat to the ecosystem, human health, food safety, animal health. Heavy metal contaminants are increasing rapidly due to industrialization especially automobile industry. Previously, various techniques were developed and improved over time like encapsulation, surface capping, landfilling, soil washing, soil flushing, electro kinetic extraction, solidification, stabilization, phytoremediation, and bioremediation. These techniques minimize the contaminants by utilizing immobilization, containment and removal mechanisms. Bioremediation is a promising technique that utilizes the capability of plants and microbial resources for decontamination of ecosystem from heavy metal contaminants. Microbes have shown capability to utilize heavy metal remediation and assist plant tolerance for heavy metal accumulation. Earlier published studies have not yet completely evaluated proficiencies to large scale however, in the present review, critical analysis of reported techniques focusing on the bioremediation have been discussed. In depth analysis for the heavy metal remediation is of paramount importance of heavy metal contaminant emerging issue of soil pollution.

Image



9 year old boy with radiant smile

These heavy metal toxicity and pollutants causing various mutational changes and mitochondrial dysfunction, free radical production resulting a pattern of syndromes called as "rasopathies"

and psychomotor dysfunction is a characteristic abnormality and its features as radiant smile, short stature, palmoplantar keratoderma and tight tendo achillius as shown in the Figure. Statins and antioxidants play a role on therapeutic aspects.

Publications

1. Muthiah, R. (2021). Isolated Acute Rheumatic Pancreatitis—A Case Report. *Case Reports in Clinical Medicine*, 10(2), 52-77.
2. Muthiah, R. (2019). Infective Endocarditis in Tetralogy of Fallot Complicating Brain Abscess—A Case Report. *Case Reports in Clinical Medicine*, 8(5), 105-126. 3.
3. Muthiah, R. (2018). Native Aortic Valve Endocarditis—A Case Report. *Case Reports in Clinical Medicine*, 7(09), 483.
4. Muthiah, R. (2018). Tropical Coronary Artery Disease and Arrhythmogenic Potentials—The Changing Pattern towards Endomyocardial Fibrosis—An Analysis. *Case Reports in Clinical Medicine*, 7(6), 397-429.
5. Muthiah, R. (2018). Isolated Patent Ductus Arteriosus in an Elderly Female, Aged 65 Years—A Case Report. *Case Reports in Clinical Medicine*, 7(05), 352.

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