TROPICAL DERMATOLOGY

METHOTREXATE AND PREDNISOLONE STUDY IN ERYTHEMA NODOSUM LEPROSUM: A RANDOMIZED CLINICAL TRIAL PROTOCOL

B De Barros [1] - A.m Sales [2] - C.r. Butlin [3] - M. Shah [4] - S. Lambert [5] - J. Darlong [6] - B.j. Rozario [3] - V.v. Pai [7] - S.n. Doni [5] - D.a. Hagge [4] - J.a. Nery [2] - K. Neupane [4] - Y. Listiawan [8] - M. Alinda [8] - A. Maghanoy [9] - P. Nicholls [1] - D.n.j. Lockwood [1] - S.I. Walker [1]

London School Of Hygiene And Tropical Medicine, Department Of Clinical Research, Faculty Of Infectious And Tropical Diseases, London, United Kingdom [1] - Oswaldo Cruz Institute, Fiocruz, Leprosy Laboratory, Rio De Janeiro, Brazil [2] - The Leprosy Mission International, Department Of Medicine, Dhaka, Bangladesh [3] - The Leprosy Mission Nepal, Anandaban Hospital, Department Of Dermatology And Mycobacterial Research Laboratories, Kathmandu, Nepal [4] - Alert Center, Department Of Dermatology, Addis Ababa, Ethiopia [5] - The Leprosy Mission Hospital, Department Of Medicine, Purulia, India [6] - Bombay Leprosy Project, Bombay Leprosy Project, Mumbai, India [7] - Soetomo Hospital, Soetomo Hospital, Surabaya, Indonesia [8] - Leonard Wood Memorial, Leonard Wood Memorial, Cebu, Philippines [9]

Background: Erythema Nodosum Leprosum (ENL) is a painful, debilitating complication of leprosy. Patients often require high doses of corticosteroids for prolonged periods. Thalidomide is expensive and not available in most countries. The use of corticosteroids for long periods is associated with adverse effects and mortality. It is a priority to identify alternative agents to treat ENL. Methotrexate (MTX) is a cheap, widely used medication which has been reported to be effective in ENL resistant to steroids and thalidomide.

Objective: To design a double blind randomized controlled trial (RCT) protocol to test the efficacy of MTX for managing ENL.

Methods and Materials: An expert group was convened on three occasions. Patients diagnosed with moderate or severe ENL at ENLIST Group centres will be randomly allocated to receive a 15 or 20 mg of oral MTX each week for 48 weeks and prednisolone 40 mg per day reducing to zero over 20 weeks. The control group will receive an identical prednisolone scheme. The participants will be stratified into two groups, those with acute ENL, those with chronic/recurrent ENL. The interventions for both populations are the same, although analysed separately. Primary outcomes are proportion of individuals who have not required additional prednisolone during the first 24 weeks and 48 weeks. Improvement in the validated ENLIST ENL Severity Scale and quality of life instruments are secondary

outcomes measured at weeks 24, 48 and 60. Adverse effects (AE) will be closely monitored clinically and using laboratory tests. Participants will receive folic acid, 5mg daily for 52 weeks except on the day of MTX to prevent AEs, and nausea will be managed with ondansetron.

Discussion: This will be the first RCT testing MTX as part of ENL treatment. We aim to recruit 150 participants with acute ENL and 400 with chronic/recurrent ENL starting January 2019.