Primary Prevention of Rheumatic Fever in India: The Reality

Jayanta Saha*

*Corresponding Author: Jayanta Saha, Cardiologist, Medical College Kolkata, India.

The other oral drugs recommended are amoxicillin, cephalosporin and erythromycin [8]. It has been reported that Azithromycin administered at a dosage of 60 mg/kg in children or administered for 3 days at a dosage of 500 mg/day in adults is more effective than oral penicillin [9,10].

Thus, the reality of prevention lies in proper anti-streptococcal vaccine. Till now majority of the work had been on M protein based vaccine assuming the fact that M protein is responsible for rheumatic fever due to structural similarity with cardiac tropomyosin. A potential barriers to M protein based vaccine are that there are > 200 emm types of GAS, its heterogeneous distribution and frequent mutation of the emm gene within a few weeks [11]. Moreover, M protein considered to be the virulent factor, is not expressed in toxic shock syndrome, necrotizing fasciitis or acute glomerulonephritis. A 26-valent (strain specific) vaccine so far developed may not be useful in developing countries. Other non-M protein based vaccines, such as the streptococcal C5a peptidase (ScpA), the IL-8 serine protease (SpyCEP) and fibronectin-binding proteins are in the process of development [12,13]. Combined vaccine is also in the process of development to prevent all types of GAS infections.

Thus, the primary prevention of rheumatic fever is a myth rather than reality and answer lies solely on primordial prevention and possibly effective vaccination.

Bibliography

Primary Prevention of Rheumatic Fever in India: The Reality
