EFFECT OF EMPIRICAL FLUCONAZOLE IN TREATMENT OF SEPSIS

An Essay

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By

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INTRODUCTION

Sepsis is defined by consensus conference as "the systemic inflammatory response syndrome that occurs during infection' it is generally viewed as a disease aggravated by the inappropriate immune response encountered in the affected individual ***(Almoget al., 2004).***

In sepsis, the inflammatory response is an attempt by the body toward off pathogens but it is often uncontrolled and detrimental, which may lead to irreversible functional and structural damage to various organ systems of the host. It is generally accepted that tissue damage in inflammatory conditions is caused primarily by host effector cells, rather than by the initiating agent ***(Carey et al., 1992).***The greater the degree of organ dysfunction produced by septic shock, the greater the resultant mortality ***(Marshall et al., 1995).***

Fluconazole (FLZ) is a well-tolerated antifungal drug with a demonstrated ability to reversibly penetrate into human PMNs. Unlike ketoconazole, which is available only as an oral preparation, fluconazole can be administered intravenously. Fluconazole has been shown to improve survival and reduce multi-organ damage in experimental ***(Tariq et al, 2003)*** and clinical septic shock ***(Jacobs et al., 2003).***

Since fluconazole has no inherent antibacterial properties, its beneficial effects in bacteremia have been attributed to its action on

the modulation of neutrophils sequestration and activation ***(Zervoset al., 1996).***

Fluconazole has been suggested to increase the bactericidal activity of neutrophils, mostly through a non-cytokine-mediated pathway ***(Forman and Torres, 2002).***

This study is therefore conducted to demonstrate the impact of fluconazole administration in patients with sepsis on their outcome and to determine whether this presumed protective effect may reduce the progression to multi-organ failure and mortality in these patients.

AIM OF THE WORK

Analysis the role of fluconazole in sepsis and septic shock.