Introduction

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Editor's Introduction

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Cyclosporin A (CsA) is a cyclic undecapeptide originally extracted from the cultures of two imperfect fungi (*Tolypocladium inflatum* Gams and *Cylindrocarpon lucidum* Booth) and subsequently purified and produced by synthesis.

Its particular immunosuppressive activities were first discovered by chance [1], but since it was first introduced into human therapy as an antirejection agent in 1978, it has completely revolutionized the prognosis of patients receiving transplanted organs [2].

CsA is the first nonsteroid drug with clearly specific immunosuppressive activity and, given that it is not cyto-static, it does not have myelotoxic or other serious side effects.

Subsequently, a large number of research studies were carried out in order to investigate its mechanism of action, which is generally considered to be related to its inhibition of the production of various cytokines (particularly inter-leukin-2) by its capacity to bind to a specific cytoplasmic receptor, cyclophilin [3], blocking RNA message transcription. Other studies were designed to verify its effectiveness not only in cases of transplantation, but also in a wide range of immunological disorders.

The first report of the therapeutic efficacy of CsA in psoriasis (at that time considered not to be of immunological origin) dates back to 1979. It was the result of a chance observation by Mueller and Herrmann [4] who were experimenting its possible activity in various types of arthropathies, including psoriatic arthropathy.

Subsequently, anecdotal reports were published from all over the world, and a series of controlled studies was carried out in order to identify the most appropriate therapeutic dose, the risk/benefit ratio and, above all, the drug's mechanism of action – studies which have led to a better understanding of the pathogenetic mechanisms underlying this common but intriguing disease.

A large part of this research has been done in Italy and its results widely reported at scientific congresses; however, until now, no complete description of these controlled experimental and clinical studies has been published. It was therefore decided to publish this account of the main Italian experiences concerning the use of CsA in psoriasis which, as can be seen, involves a very broad spectrum of cases and allows some solid conclusions to be drawn as to the guidelines to follow in the future.

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