Serratiopeptidase: A drug without clear benefits

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Madam, Serratiopeptidase is a proteolytic enzyme produced by serratia species E15, isolated from the intestine of silkworm. It has become one of the most widely used medications by both physicians and surgeons and is said to have efficacy in reducing inflammation via the breakdown of various inflammatory mediators.[1] Serratiopeptidase is mostly prescribed in inflammatory illnesses and in some non-inflammatory disorders albeit less commonly due to its analgesic effects. It is even used very commonly in the post-operative period to improve healing and to reduce inflammation of the surgical wound.[2]

However, an online literature search on Medline, Cochrane library and Google scholar using the search words serratiopeptidase, serrapeptase, serralysin, serratiapeptase and proteolytic enzymes retrieved only small-scale, inadequately structured, studies reflecting some anti-inflammatory effects of serratiopeptidase, but most of these failed to demonstrate significant benefits from the drug.[3] Serratiopeptidase has a lower efficacy as compared to the NSAIDs as an analgesic but demonstrated greater anti-inflammatory effects than the NSAIDs.[4] Therefore, it is still not sufficiently efficacious to be used solely and rather, is almost always used in combination with NSAIDs to reduce pain symptoms.[5]

As a matter of fact, one of the authors' of this letter had significant experience with the drug in treating seronegative spondyloarthropathy. The drug was used for about a week but no improvement was noted in the reduction of symptoms and the person remained severely disabled. Switching to meloxicam significantly showed good response.

In the light of above reports and observations, there is a dire need of conducting well-designed clinical trial-based studies for a wider spectrum of conditions and limit its use until its benefits and/or contraindications are substantially proven.[3]

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