CORRESPONDENCE

A Patient of Severe Ankylosing Spondylitis with Severe Dilated Cardiomyopathy: What is the Treatment Option?

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Sir/Madam,

Ankylosing spondylitis (AS) is a spondyloarthropathy where the use of biologics is widespread. Mainly the TNF-alpha inhibitors are the preferred biologics in AS.[1] However, there are certain conditions where TNF-alpha blockers can't be used. Newer therapeutic options may be useful in such cases, as our case demonstrates.

A 30 year old woman came with a history of progressive back pain for the last three years. She had been diagnosed with ankylosing spondylitis (Figure 1) and had been treated with NSAIDs, sulfasalazine and thalidomide for a long time. However, the pain and stiffness continued to progress and she was planned for biological therapy. This time, her pain, in visual analog scale, was 8/10. Reassessment of the patient before biological therapy revealed that she had also been suffering from dyspnoea for the last three months. She had dyspnoea on mild activity like walking about 50 feet; occasionally there was orthopnoea too.

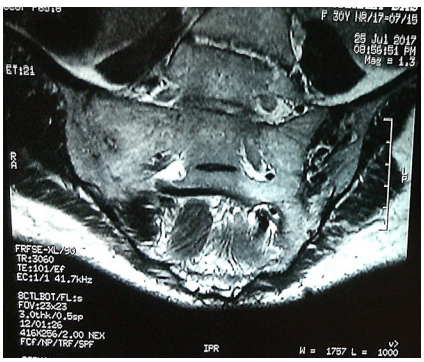

Fig. 1: MRI scan of SI joints of the patient showing ankyloses of the right side and surrounding bone marrow edema, suggestive of active arthritis

Evaluation of this dyspnoea revealed increased cardio-thoracic ratio in the chest X-ray. Echocardiography with Doppler was done which showed dilated cardiomyopathy with global hypokinesia of the left ventricle and an ejection fraction of 30%. The patient did not give any previous history of angina. She did not have any risk factor for ischemic heart disease like diabetes, hypertension or dyslipidemia.

The cause of this cardiomyopathy was unknown. But since this was present, use of TNF-alpha inhibitors was considered unadvisable. Also, since there were symptoms of heart failure, increase of NSAID dose was also guarded. A multi-disciplinary meeting was arranged where various treatment options were considered. Finally it was decided to treat her with secukinumab. This new drug has recently been launched in India and it works by a pathway different from TNF-alpha.

She was started on secukinumab (Scapho™) 150 mg s.c. weekly for 3 weeks and then monthly. She had significant improvement in her pain. After 1 month, the pain decreased to 6/10 in VAS and after 3 months, it was 4/10. The stiffness, however, was slower to respond. She is now being continued on regular physiotherapy and occupational therapy. There had been no worsening of the cardiomyopathy. She is also being maintained on drugs for the heart failure. There has been no significant drug interaction.

TNF-alpha blockers are the preferred biologicals in AS.[1] But heart failure is a contraindication to its use[2]. It use in patients with current or impending heart failure is associated with increased hospitalization and mortality.[2] Thus, in our patient, use of this class of biologics was not an option. In the ACR guidelines, in such situations with strong contraindication, sulphasalazine or pamidronate have been advised[1]. But our patient did not improve on sulphasalazine and pamidronate have not shown much efficacy in trials.[3]

Recently a new therapeutic option has become available in India: secukinumab. This drug acts by inhibiting the IL-17 pathway and it has shown efficacy in AS.[4] Moreover, it is not known, till now, to aggravate heart failure. Thus, for our patient, this was a good therapeutic option.

We present this case to highlight this therapeutic option in similar patients. In India, where most of health spending is out-of-pocket, cost may be an issue in treatment with these newer biologicals. But later, as the price comes down, such treatment may be more widely used.

References

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