

The ApiFix System is a new idea in spinal curve correction. It was developed in Israel and has been used in Europe since 2012. It is designed to correct certain types of moderate scoliosis, mostly single curves. The ApiFix procedure allows the patient to keep most¹ of their spine flexibility while improving the curve. The surgery to put it in is much less complex than the usual surgery to treat a spinal curve. The time in the hospital and recovery period at home are shorter. Because it is a new device, we do not yet know how it will perform long term.

The device is placed on the inside part of the curve. It is attached to the spine with two screws at the top and a single screw at the bottom of the device. It usually covers five to seven levels of the spine. The device has a ratchet mechanism that is meant to gradually stretch and straighten the spine from the inside of the curve. This also aims to let the back grow without curving again. The amount of improvement in the curve is usually less than with a spine fusion.

The initial reports of the ApiFix device for treating scoliosis were written by the inventor^{2,3} and were encouraging. A 2021 study from a different center showed some concerning results. Half of their patients had problems and needed more surgery⁴. That study included only early generation implants. The current system may have fixed these problems, but that is not yet proven.

Use of the ApiFix device has not been reported in adults. As of the end of 2021, about 650 surgeries have been done in the world. Some patients are over 8 years out from surgery. The ApiFix System was approved in the U.S. as a Humanitarian Use Device. Its use in the United States began in June 2020. Longer follow-up of the current generation device is needed before it can be widely accepted.



References

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