BioSpectrum
the business of Bio & Health Sciences
ASIA EDITION

Korea develops world's first vest-like hybrid brace for scoliosis patients

May 7, 2021 | News

Convenient aid for teenage scoliosis patients from those with mild scoliotic symptoms to neuromuscular disease who struggle to wear rigid plastic braces



VNTC, a MedTech company based in South Korea, has developed Spinamic, the world's first vest-like wearable hybrid scoliosis brace, which combines the benefits of both conventional rigid and soft-type scoliosis braces.

Spinamic is suitable for a wide range of patients from those with mild scoliotic symptoms to neuromuscular disease patients who struggle to wear rigid plastic braces.

Spinamic improves patients' quality of life by minimizing side effects from conventional braces, such as discomfort and psychological stress, without compromising the therapeutic effects of rigid braces.

4% of the world suffers from scoliosis, 44% of which are teenagers. Scoliosis is a disease that develops into mild, moderate, and severe state over a long period. Proactive treatment for scoliosis is necessary to avoid a possible surgery that might leave scars and side effects in the future. Spinamic was designed to combat these psychological aspects such as depression and loss of confidence for young patients.

Conventional rigid-type scoliosis braces could result in various side effects, including rib fractures, muscular weakness, shortness of breath, loss of confidence, and depression. As most scoliosis patients are teenagers, who are still growing, these braces may not fit for long or cause hygienic problems.

Spinamic employs a three-point pressure system like rigid braces and features dials used to adjust the pressure strength as the patient's condition improves. Accordingly, medical professionals can customize the brace as patients grow and also detach its components to wash them easily. Spinamic's aesthetic design reduces the visual burden on the patient and provides psychological stability and comfort to maximize compliance enabling patients to wear it for the recommended wearing time of 18 hours a day.