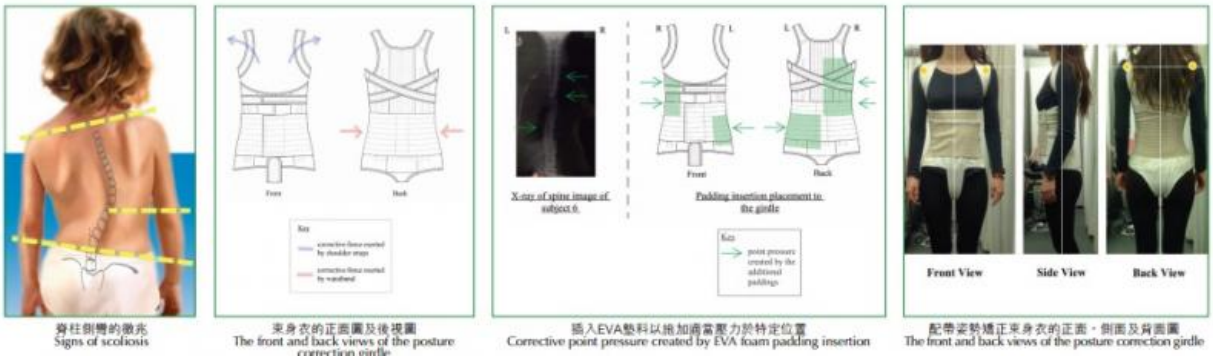
Posture correction girdle for adolescents with early scoliosis

May 14 2015



Credit: Hong Kong PolyU

Adolescent idiopathic scoliosis gradually leads to three dimensional deformity of the spine in youths. Patients with spinal curvatures of more than 41 degrees have to be treated with surgery. Patients with curvatures of 25 to 40 degrees have to wear a brace to control curve progression. But since braces need to be worn for long periods of time and may cause skin irritations as well as discomforts, compliance is often low, affecting the success rate of the treatment.

This project aims to develop a comfortable posture correction girdle that has significant impacts; one that provides adequate support for posture correction on a daily basis, and can be equipped with sensors, which track and monitor their postures. As a result, this will reduce the patients'

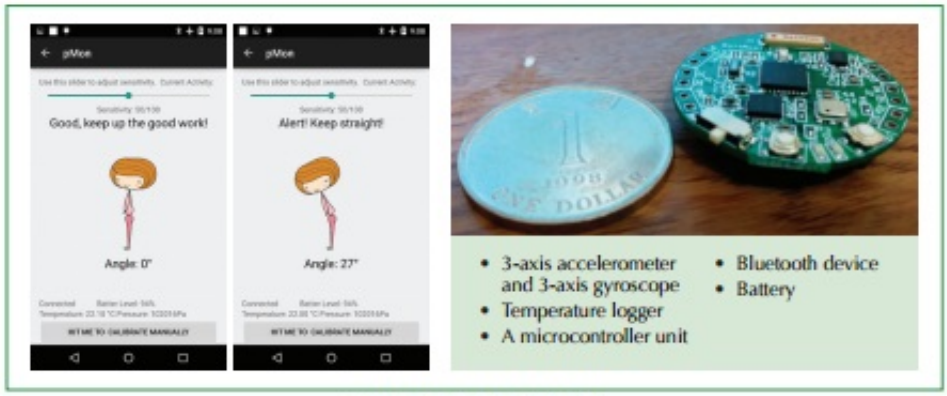
likelihood of needing brace wear or surgery in future.

Special Features and Advantages:

- Snug fit provides supportive and corrective forces
- Double shoulder straps correct the posture of thoracic spine
- Provides circumferential force onto body to reduce lumbar lordosis
- Made of soft materials to improve patient compliance
- Equipped with sensors to monitor posture
- Reduces the possibility of spinal curve progression

Applications:

- Helps adolescents with scoliosis improve imbalance in posture and reduces the likelihood of curve progression
- Trains and improves posture



姿勢矯正傳感器及使用介面
Posture correction sensor and the user interface

Credit: Hong Kong PolyU

Medical Xpress

Provided by Hong Kong Polytechnic University

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