Bracing plays a vital role in the non-operative treatment of adolescent idiopathic scoliosis (AIS), especially when detected early. Recent high-quality studies confirm that bracing can alter the natural progression of a curve, potentially preventing the need for surgery. The concept is based on the ability of external force to guide spine growth, which has been experimentally proven. However, bracing cannot straighten the spine; its primary goal is to halt the curve's progression.

The evidence for bracing is strong, with studies showing that approximately two-thirds of AIS curves can be controlled through bracing. However, there are concerns about the broad application of bracing indications, potentially leading to unnecessary treatment for some patients. Identifying the 25% of patients who will benefit from bracing remains a challenge.

Bracing is most effective when applied to curves between 25-45° during the rapid growth phase, but compliance is crucial for success. The choice of brace type matters less than its quality and corrective effect. The practice of bracing requires a close orthotist-surgeon relationship, and follow-up visits are essential to monitor progress.

Ultimately, bracing remains a valuable non-surgical option for AIS, but careful patient selection and close monitoring are necessary for optimal results.

**Keywords:** Brace, Adolescent idiopathic scoliosis.
41% of patients in the brace group who spent little time wearing the brace did not reach surgical threshold. This suggests that the current bracing indications are too broad and we need to brace at least three patients, to save one patient from surgery. Therefore, many remain skeptical about potentially unnecessary brace treatment for many to save a few from surgery. While bracing seems to alter natural history for these group of AIS patients who are at high risk for progression, it seems to do so approximately 25% of the time. At present, we are unable to identify, which are these 25% who will benefit from bracing.

The other argument against bracing is the applicability of the results of a study like BRAIST in the real world. In the study, high-quality braces were made by dedicated teams who kept a close follow-up. In a country like India, reproducing results of such bracing programs at present are difficult. Hence, it is likely that the real-world success of bracing is a bit less optimistic than quoted in literature.

**Indication for Bracing**

1. Curves 25–45° in the most rapidly growing time (Risser 0–1, <1 year post menarchal)
2. Smaller curves (<25°) that have documented progression (>5°) in (Risser 0–1)
3. Curves 30–45° who are Risser 2–3 may be offered but are less likely to alter natural history.

Bracing is less useful in: (1) Overweight kids, (2) high thoracic apex, (3) lordotic thoracic spine, (4) other major medical problems that interferes with bracing, (5) not compliant and do not accept the idea of bracing, and (6) patients who have passed peak height velocity and are within 1 year of completing skeletal maturity or are 1-year post menarche.

**What Type of Brace is the Best?**

- There are many different designs and supplies. The quality and the corrective effect of the brace are more important than the type. This depends on the orthotist’s skill, experience, and knowledge. Percentage in brace correction correlates with effectiveness and final result in most studies.
- The Milwaukee cervico-thoracic-lumbo-sacral orthosis (TLSO) is as effective as any orthosis, but its use has declined due to patient preferences and this brace still has a limited role for curve with high apex or failure. The TLSO worn full-time is the current standard. TLSO can be custom made. The Boston Brace is the most widely studied TLSO in the literature. It is made from an “off-the-shelf” module chosen using measurements of the patient. Pads are then added at areas needed to produce correction. Trim lines are made to produce reliefs’ areas.

**Issue of Compliance**

The effectiveness of bracing is dose-dependent. The Texas Scottish Rite Hospital study by Karol et al. showed that 14 h a day avoid progression.[4] In BRAIST study, 13 h a day is linked with success in 90% of patients.[1] Full-time brace wear (>23 h) is more effective than part-time wear and is encouraged.

**Conclusion**

Bracing is the only non-operative treatment that has been shown to change natural history and avoid surgery in some patients with AIS. The art of bracing requires dedicated effort from the surgeon as well as the orthotist. Communication and counseling with the family and the patient are crucial for success as compliance and acceptance for full-time brace wear is a challenge.

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**Declaration of patient consent:** The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has/her given his/her consent for his/her images and other clinical information to be reported in the Journal. The patient understands that his/her name and initials will not be published, and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

**Conflict of Interest:** NIL; **Source of Support:** NIL


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