



Featured Pearl of the Quarter!

PROS PEARLS

Secondary Sexual Characteristics in Boys Study: Inter-Rater Reliability of Pubertal Staging

- As part of a larger PROS study to stage key pubertal characteristics for a national sample of US boys, to address a dearth of literature on inter-rater reliability of such staging, a substudy was conducted.
- Key pubertal markers included: pubic hair and genitalia (utilizing the appropriate five-point Tanner scales), left and right testicular size (assessed through use of a four-bead modified orchidometer assessing testicular volume ranging from ≤ 1 to ≥ 4) and axillary hair (measured on a three-point scale).
- Practitioners underwent training through review of a detailed pubertal staging manual, and subsequent qualifying examination, to assess competence in staging and use of the four-bead modified orchidometer (assessing testicular volume ranging from ≤ 1 to ≥ 4).
- Following a passing score, pairs of raters from eight practices across the country conducted assessments on 10 boys per practice.
- The results indicated that with appropriate training, office-based practitioners can reliably stage key markers of puberty in males, and accurately identify signs of pubertal initiation. These results provided assurance of reliability for the larger national study described above, potentially leading to new norms for the initiation of puberty in males, and better care for boys (eg, more appropriate referral for precocious puberty workups).

The PROS SSCIB Study was conducted by clinicians from PROS practices with collaboration from the National Medical Association's Pediatric Research Network (NMAPedsNet) and the Academic Pediatric Association's Continuity Research Network (CORNET). Practices across 41 states and one Canadian practice enrolled boys 6-16 years of age between July 2005 and February 2010. Data from 4,131 boys comprise the final study sample. Main study manuscript writing is under way.

The citation and link to the manuscript follows below:

Slora EJ, Bocian AB, Herman-Giddens ME, Harris DL, Pedlow SE, Dowshen SA, Wasserman RC. Assessing inter-rater reliability (IRR) of Tanner staging and orchidometer use with boys: A study from PROS. *Journal of Pediatric Endocrinology and Metabolism*. 2009;22(4):291-300.