



Figure 2 Proposed sites for inter-recti distance measurement using ultrasonographic imaging based on the scoping review results synthesis (Adopted from Opala-Berdzik et al., 2023)

Image caption: AU1: 1/2 of the superior umbilical border-xiphoid distance; AU2: 1/4 of the superior umbilical border-xiphoid distance; U: the superior umbilical border; and BU:1/4 of the superior umbilical border-pubis distance (Adopted from Opala-Berdzik et al., 2023)

3.3 Functional assessment methods

With increasing recognition of DRA as a condition with functional implications, reliance solely on structural indicators such as IRD is insufficient, making functional assessment an essential complement. Core muscle function assessment is central, focusing on activation capacity, recruitment sequence, and coordination of deep stabilizing muscles, including the transversus abdominis, multifidus, diaphragm, and pelvic floor muscles. Common objective methods include pressure biofeedback units (PBU), surface electromyography (sEMG), ultrasound-based muscle thickness observation, and functional tests such as plank, bridging, and curl-up endurance tests (Du et al., 2025). Multidimensional tools such as the Abdominal Trunk Function Protocol (ATFP) combine objective performance and subjective symptoms to comprehensively evaluate core stability, muscle endurance, and functional limitations in daily activities (Du et al., 2025).

Pain and symptom burden are also important components of functional assessment. DRA is often associated with low back pain, lumbopelvic pain, fatigue, and difficulty in specific movements. Clinical evaluation typically uses visual analog scale (VAS) or numeric rating scale (NRS) to quantify pain intensity, along with assessment of onset, duration, and impact on functional activities. Studies have shown that DRA patients may exhibit altered abdominal activation patterns and muscle thickness changes during Valsalva maneuvers, coughing, and functional movements. These abnormalities may not always correlate directly with IRD width but can significantly affect load transfer and core control (Skvortsov et al., 2024). Therefore, relying solely on structural measurements may be insufficient to explain clinical symptoms and functional impairment.

Quality of life and patient-reported outcomes (PROs) provide a broader perspective on the overall impact of DRA. Common instruments include the SF-36, Disability Rating Index (DRI), the self-reported component of ATFP, and pelvic floor and urogenital symptom questionnaires such as UDI-6 and IIQ-7. These tools assess limitations in activities such as lifting, running, heavy work, social participation, and psychological well-being (Du et al., 2025). Importantly, previous studies indicate that IRD is not always an independent predictor of functional impairment or