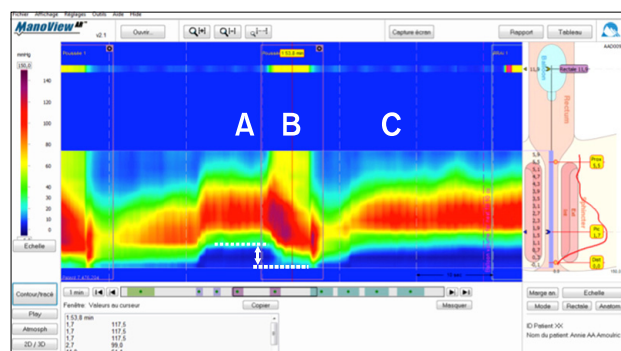


# Three-dimension High-resolution Anorectal Manometry Can Precisely Measure Perineal Descent

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A 65-year-old woman was referred to investigate a long history of intractable constipation. Clinical examination revealed a descending perineum and digital examination diagnosed a large rectocele without stool in the rectum. The patient underwent 3-dimension high-resolution anorectal manometry (3DHRAM), dynamic endo-anal ultrasonography (D-EUS) and conventional defecography. The 3DHRAM showed mean resting pressure of 84 mmHg, mean maximal squeezing pressure of 207 mmHg and length of the high-pressure zone of 2.7 mm. The recto-anal inhibitory reflex was present and the rectal sensitivity was normal (10 mL). However there was an incomplete anal relaxation during attempted defecation indicating a pelvic floor dyssynergia. In addition during attempted defecation a 9 mm perineal descent on the manometric probe was observed in the left lateral decubitus position (Figure). At the end of the bear down the perineum regained its initial position indicating that the probe has not moved. Conventional defecography showed a 9.2 mm perineal descent from the pubo-coccygeal line, a retentive rectocele of 69 mm and rectal intussusception. D-EUS showed no anal sphincter defect and, at dynamic time, showed a rectocele measured at 35 mm and descending perineum measured at 15 mm according to the method described by Vitton et al.<sup>1</sup>



**Figure.** Result of the 3-dimension high-resolution anorectal manometry during the defecation effort. Before (A), during (B) and after (C) defecation effort. The row between the 2 dotted lines measures the size of the perineal descent. Note that in C the perineum regain its initial position (as in A).

This observation confirms that 3DHRAM can provide morphological data as reported by previous data.<sup>2-5</sup> Here, for the first time, 3DHRAM demonstrated to diagnose precisely a perineal descent which was also diagnosed by conventional defecography suggesting that the position of the patient during the procedure might not be such an important determinant of pelvic floor dis-

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order measurement.

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