

Tissue	E0 (min;max) (kPa)	meanE1 (min;max) (kPa)	meanStress at first micro- failure (kPa)	Strain at first microfailure least	First microfailure at an average of
Skin (n=10)	299 (247;319)	907 (226;1024)	603 ± 277	29%	54 ± 16 % of strain
Vagina (n=10)	830 (277;711)	2250 (253;651)	869 ± 339	13%	27 ± 13 % of strain
EAS (n=10)	332 (133;502)	435 (40;1026)	271 ± 163	38%	70 ± 21 % of strain
IAS (n=10)	253 (203;621)	334 (279;843)	428 ± 172	46%	131 ± 55 % of strain
Anal mucosa (n=10)	1108 (477; 1254)	1322 (573;3067)	370 ± 144	14%	22 ± 6 % of strain

Table 2. Parameter values from experimental stress-strain curves according to the perineal tissue (Yeoh model): E0 and E1 tangent modulus, Stress (kPa) at the first microfailure, Strain (%) at the first microfailure (minimal value, average value)

Results are expressed as mean ± standard deviation

EAS: external anal sphincter; IAS: internal anal sphincter; kPa: kilopascal

For each tissue, the mean stress and the mean strain were calculated up to the first rupture among all curves for the same tissue. Low strain was defined at the beginning of the master (mean) curve and used to define E0. E1 was defined as the tangent modulus of the curve at the end of the mean curve. Minimal E0 and E1 were calculated from the lowest curve for each layer of perineal tissue. Maximal E0 and E1 were calculated from the highest curve for each layer of perineal tissue.