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PROLAPSE WORSENS WITH AGE, DOESN'T IT?

Hypothesis / aims of study

Female pelvic organ prolapse is a common condition in parous women and may give rise to symptoms of vaginal fullness and dragging, with the patient eventually noticing a protrusion from the vagina. Certain forms of prolapse are associated with bladder and bowel dysfunction, although the exact nature and magnitude of such associations are not well defined at present. As prolapse is a relative indication for surgery, options of pelvic reconstructive surgery have to be discussed with patients. Commonly, prolapse surgery is undertaken on the assumption that the condition is likely to worsen over time. This assumption has recently become less plausible, as the author and others have been able to show that mild to moderate pelvic organ descent is common in young, nulligravid women[1] and that many women with mild and moderate prolapse are asymptomatic[2]. A large cohort of women assessed by ultrasound for pelvic organ prolapse was analysed to determine associations between patient age and pelvic organ descent.

Study design, materials and methods

At a tertiary urogynaecological centre, 1112 women were seen for a standardised interview, a clinical examination using the ICS POP-Q system, multi-channel urodynamics and ultrasound imaging supine and after voiding, using 2D and 3D capable systems such as Philips HDI 1000, Medison SA 8000 and GE Kretz Voluson 730 expert. Pelvic organ descent on ultrasound was determined relative to the inferoposterior margin of the symphysis pubis, as previously described[3]. In cases with marked descent of one compartment it was sometimes impossible to view the opposite compartment sufficiently well for numerical assessment which explains reduced numbers of observations for posterior compartment descent. As regards the uterus, this is often invisible if atrophic or very high, and this, together with 229 cases of previous hysterectomy, explains a markedly reduced number of observations for uterine descent.

Figure 1: Relationship between age at presentation and cystocele descent (n= 972)

Results

After removal of 139 datasets of women with previous incontinence or prolapse surgery, 973 datasets remained. Mean age was 54 years (range 17-90), mean vaginal parity was 2.4 (range 0-12), with 31% of women complaining of symptoms of prolapse. There were 972 observations as regards bladder descent, 857 for rectocele descent and 221 for uterine descent. There were no meaningful correlations between clinical prolapse assessment and patient age, with r values between 0.015 (uterine descent) and 0.08 (rectocele). On univariate regression, we found a weak and complex relationship between age and cystocele, with a positive correlation to menopause and a negative relationship thereafter (r2 adj. = 3.2%, P< 0.001). On multivariate regression a large part of this positive relationship between age and cystocele in premenopausal women was explained by childbirth. The same was true for rectocele (r2 adj.= 4.2%, P< 0.001), but for uterine descent the relationship was stronger (r2 adj. =8.6%, P< 0.001) and virtually linear.

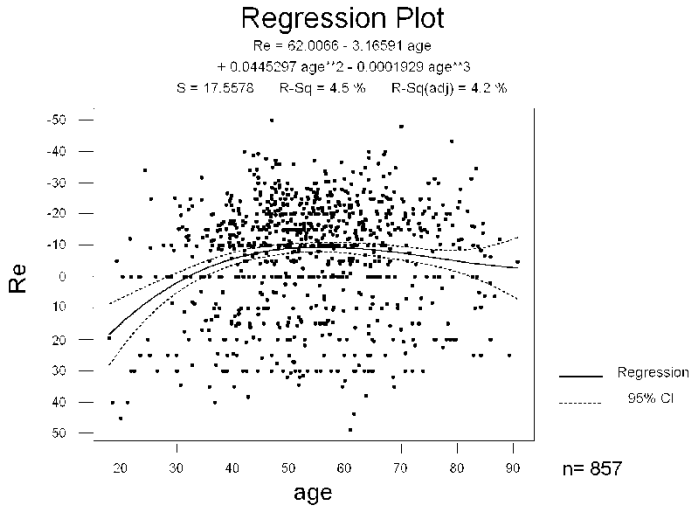

Figure 2: Relationship between age at presentation and cystocele descent (n= 857)

Interpretation of results

From our data obtained in a large cohort of women symptomatic for pelvic floor disorders, it appears that ageing plays only a very limited role in the aetiology and pathogenesis of pelvic organ prolapse. There may be an increase in organ descent in premenopausal women due to ageing, but this effect is reversed after menopause, at least for anterior and posterior compartment prolapse.

Our results clearly contradict epidemiological studies showing age to be a risk factor for pelvic reconstructive surgery. One wonders whether this discrepancy may be due to confounders such as symptoms of prolapse and/or bladder or bowel dysfunction. Symptoms of prolapse may become more likely with increasing urogenital atrophy, and it is possible that prolapse repair is often undertaken in the hope of ameliorating bladder or bowel symptoms the prevalence of which increases with age, such as urge incontinence, frequency, nocturia, constipation and symptoms of obstructive defecation.

Concluding message

Ageing seems to play only a very limited role in the aetiology and pathogenesis of pelvic organ prolapse.

References

1 American Journal of Obstetrics & Gynecology(2004) **191**(1); 95-9.
2 International Urogynecology Journal (2006)**17**(S2); S148-149.
3 Ultrasound in Obstetrics & Gynecology (2004)**23;** 80-92.

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