Self-report of Uterine Leiomyoma Size Versus Ultrasound Evidence

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Objective: Research capabilities could be strengthened if self-report of uterine leiomyoma (UL) size was a valid measure that could be used in analyses. We sought to determine the accuracy of self-report of the largest fibroid.

Methods: Sixty-three women from the NIEHS Uterine Fibroid Study had ultrasounds between their baseline (1996-99) and follow-up interviews (2001-02). They were asked about the size of their largest UL from their most recent ultrasound. Size was reported as a numeric measure, as small, medium or large, or as uterine size (weeks gestation). We compared the reported size with measures reported in ultrasound records serving as the standard.

Results: Eleven women reported a numeric measure – 4 overreported and 7 underreported the UL size and 7 were within a centimeter of the ultrasound measure. Women with smaller UL tended to report smaller values and those with larger UL tended to report larger values.

Five women reported weeks gestation ranging 12-26 weeks while the UL were 3cm-9.6cm; self-report given as gestational age was not at all related to the ultrasound measure.

Eighteen women reported a small UL, 12 a medium and 17 a large. Their ranges in ultrasound measures were 0.8cm-6cm, 2.5cm-9.7cm, and 2.5cm-9.8cm, respectively. Their medians were 2.2cm, 4.3cm and 5.1 cm; their means and standard deviations were 2.5cm (1.3cm), 5.2cm (2.6cm) and 5.5cm (2.3cm).

Conclusions: Variability of self-report will likely be unacceptably large for studies with a small sample, but larger studies may be able to utilize self-report for their analyses involving UL size. Describing fibroids as “small”, “medium”or “large” may be the most accurate self-report method of those examined, and medium and large may be grouped together. Exact measures may also be used as approximations. Weeks gestation had no utility.