(unrevised) leaflet had implied that homosexuals with stable partnerships were still eligible as donors. Certainly, our homosexual donors had a much lower incidence of markers for sexually transmitted disease than those attending special clinics, where half were reported to have antihepatitis B core antigen.³ This should not encourage complacency, however, as HTLV-III has been isolated from the lymphocytes of some at risk people who were negative for anti-HTLV-III.⁵ We intend to follow up these homosexual donors.

It is alarming that some male homosexuals still donate blood, and it is vital that all possible measures are taken to discourage this.

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Ultrasound in first trimester shows no difference in fetal size between the sexes

At birth girls are on average smaller than boys in both length and weight, differences in weight ranging from 50 to 150 g and in length ranging from 0.5 to 1.0 cm.¹ It is well documented that these differences are not present until after the 20th week of gestation.^{1,2} There has been recent controversy on how early in pregnancy these differences can be detected by ultrasonic anthropometry. Pedersen reported that boy fetuses were on average larger than girl fetuses as early as 8-12 weeks as calculated by menstrual age, thus suggesting that this early divergence in size was due to a genetic rather than hormonal influence.³ Our data, however, show no statistically significant difference in size between boy and girl fetuses during this early stage of pregnancy.

Subjects, methods, and results

Fetal size was evaluated by both crown-rump length and biparietal diameter using ultrasound measurement (Searle Imager 2300, dynamic scanner). A total of 1208 healthy pregnant women were examined. All fetuses underwent measurement of crown-rump length up to 14 weeks of gestation (as measured from date of last menstrual period) and 666 also had the biparietal diameter measured up to 22 weeks. In addition, data were collected from 22 pregnancies conceived by artificial insemination using donor semen.

Crown-rump length—A total of 1208 consecutive subjects with normal pregnancies were evaluated in the screening programme measuring crown-rump length. Eighty per cent of all pregnant women in the Linköping area are examined before the 15th gestational week. To study a possible difference

in measurements accurately, we included only those pregnancies in which the absolute difference in ages calculated from last menstrual period and crown-rump length⁴ was less than eight days. If crown-rump lengths differ according to fetal sex, as suggested,³ girl fetuses would in general have a shorter menstrual age calculated from crown-rump length than that calculated from last menstrual period compared with boys. This would be readily observed in a χ^2 analysis of the distribution of observed and expected numbers of fetuses classified according to the difference in days between dates calculated by the two methods.⁴ The results (table) showed no significant difference in distribution of crown-rump lengths between male and female fetuses as judged from the differences in dating between menstrual age and age estimated from crown-rump length ($p=0.38$ according to χ^2 analysis and mode=0 days of difference for both groups). Data from 22 pregnancies with dates calculated from both time of insemination and crown-rump length⁵ (13 male, nine female fetuses) showed no statistically significant difference in median values using the Mann-Whitney U test.

Biparietal diameter—Altogether 666 apparently normal pregnancies dated by crown-rump length were further investigated by measurement of biparietal diameter between the 11th and 22nd weeks. Analysis by χ^2 test showed no statistically significant difference in diameters between male and female fetuses as judged from observed and expected sizes according to menstrual age.

Observed (O) and expected (E) numbers of fetuses classified according to difference in age as calculated from date of last menstrual period and crown-rump length

Difference in days between menstrual age and age estimated from crown-rump length	Girl fetuses			Boy fetuses		
	O	E	χ^2	O	E	χ^2
-7	21	18.7	0.2	19	21.3	0.2
-6	31	25.2	1.1	23	28.8	1.0
-5	30	37.3	1.3	50	42.7	1.1
-4	39	39.2	0.0	45	44.8	0.0
-3	57	48.5	1.3	47	55.5	1.1
-2	39	46.2	1.0	60	52.8	0.9
-1	64	62.1	0.0	69	70.9	0.0
0 (mode)	66	69.1	0.1	82	78.9	0.1
1	45	51.3	0.7	65	58.7	0.6
2	47	49.9	0.1	60	57.1	0.1
3	37	28.9	2.0	25	33.1	1.7
4	18	19.6	0.1	24	22.4	0.1
5	8	8.4	0.0	10	9.6	0.0
6	9	7.5	0.1	7	8.5	0.1
7	7	6.1	0.0	6	6.9	0.0

Sum of $\chi^2 = 14.9$; df = 14; $p = 0.38$.

Comment

In this series data based on measurements of crown-rump length and biparietal diameter showed no evidence of a difference in size between boy and girl fetuses as early as the eighth to 22nd weeks of gestation. This finding, validated by three sets of data—namely, crown-rump length measured six to 14 weeks after the date of the last menstrual period, biparietal diameter measured at 11-22 weeks, and measurements in pregnancies conceived by artificial insemination of donor semen—contradicts the report that a difference in size due to fetal sex occurs in the first trimester.³

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