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CHARACTERISTICS OF FETAL GROWTH IN THE POPULATION OF SOUTH-WEST CROATIA

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Original scientific paper

Keywords: fetal biometry, fetal growth, ultrasound, Republic of Croatia

Summary. The aim of this work was to define nomograms and standards of fetal biometric parameters in the population of pregnant women in southwest region of Croatia. *Study design and Methods*. During the nine-year period from 1st January 2002 to 31st December 2010 ultrasound examination was performed on 1594 pregnant women with singleton uncomplicated pregnancy between 22nd and 41st gestation week. In total, 2728 ultrasound measurements were performed. Measurement were obtained for biparietal diameter, femur length, abdominal circumference and the transverse cerebellar diameter. The results were presented as mean values with standard deviations and percentiles. *Results*. Normal fetal biometry charts for own population of pregnant women in the southwest region of Croatia were constructed.

Introduction

Fetal ultrasound biometry represents an integral part of routine antenatal care and it is used to determine the gestational age, to follow fetal growth and diagnose its disorders. Birth weight is one of the most important prognostic factors of perinatal outcome. The non-existence of fetal growth standard for the domestic population resulted in the clinical use of fetal growth tables made by foreign authors (1,2). Considering the numerous researches and knowledge on the differences between fetal growth in different world populations, which are the consequence of ethnic and geographic differences (3–7), the aim of this research was to define fetal growth standards for the local population of the Primorje and Gorski kotar County, i.e. the south-western part of Croatia and to encourage perinatologists from other parts of the country to conduct similar researches, in order to create unique fetal growth tables for the entire Republic of Croatia over time.

Subjects and Methods

We have included 1594 pregnant women with singleton uncomplicated pregnancy in our research. The study did not include cases with fetal malformations, chromosomopathy and late fetal death. This study was prospective and conducted during a nine-year period. Measurements were obtained for biparietal diameter (BPD), femur length (FL), abdominal circumference (AC) and the transverse cerebellar diameter (TCD) between the 22nd and 41st gestation week, due to the fact that the birth is defined as the termination of the pregnancy after the 22nd gestational week. The BPD was measured on the regular transverse section of the fetal head, after showing the midline echo, which included the characteristic echo of *cavum septi pellucidi*. At the same time, this section showed the anterior and posterior horns of the lateral ventricles of the brain. The value of BPD is shown as the distance between the outer borders of the parietal bones of the skull. FL was measured between the greater trochanter and lateral condyle after a clear image of the femur and at a somewhat reduced output intensity of the ultrasound device. AC is calculated by using a method of two mutually vertical diameters, which are measured on the transverse, often circular section of the abdomen, at the level of the short intra-abdominal segment of the umbilical vein, and under the image of the fetal heart. The formula for the circumference which is AC = (D1 + D2) x 1.57 was used. The transverse diameter of the cerebellum or transverse cerebellar diameter (TCD) was measured at the suboccipitobregmatic plane of the fetal head, after a clear image of the cerebellum and its contours, and the marks for the measurements of its diameter were placed on the shown edges. A maximum of three measurements of tested parameters were made during one pregnancy, but in different weeks. All ultrasound biometric measurements during this carefully planned and conducted study were performed by a perinatologist having experience in the field of ultrasound diagnostics, thereby avoiding the possibility of interobserver error. Siemens Acuson An-

Table 1. Mean values with standard deviation and centile values for biparietal diameter (BPD) according to gestational age (n=2089)

Gestational age /weeks/ Gestacijska dob /tjedni/	Number of measurements Broj mjerenja	X ± SD [mm]	Centiles / Centile				
			5.	10.	50.	90.	95.
22	20	55,8±2,15	52,5	53,5	56,0	58,5	60,0
23	26	59,3±2,88	55,0	56,0	59,5	63,0	64,0
24	20	62,0±2,16	59,0	59,0	62,0	65,0	65,5
25	31	65,6±2,93	60,0	62,0	66,0	69,0	70,0
26	47	67,5±2,99	63,0	63,0	68,0	72,0	72,0
27	66	71,2±3,50	66,0	67,0	72,0	76,0	76,0
28	86	72,8±3,39	68,0	68,0	73,0	77,0	77,0
29	89	76,3±3,88	71,0	72,0	76,0	81,0	82,0
30	85	78,2±3,58	72,0	73,0	78,0	83,0	84,0
31	119	80,3±3,55	73,0	75,0	81,0	85,0	86,0
32	151	82,9±3,32	77,0	79,0	83,0	87,0	88,0
33	165	84,8±4,01	77,0	80,0	85,0	89,0	91,0
34	150	86,5±3,87	79,0	82,0	87,0	91,0	92,0
35	159	88,2±3,39	82,0	84,0	88,0	93,0	93,0
36	187	89,7±3,87	83,0	85,0	90,0	94,0	95,0
37	207	91,4±3,51	85,0	87,0	92,0	96,0	97,0
38	193	92,4±3,81	87,0	88,0	92,0	97,0	99,0
39	129	95,0±3,99	89,0	90,0	95,0	101,0	102,0
40	116	95,0±3,25	90,0	91,0	95,0	99,0	100,0
41	43	96,1±3,22	90,0	91,0	95,0	99,0	102,0

X ± SD – mean value ± standard deviation / srednja vrijednost ± standardna devijacija; n – number of measurements / broj mjerenja

Table 2. Mean values with standard deviation and centile values for femur length (FL) according to gestational age (n=2090)

Gestational age /weeks/ Gestacijska dob /tjedni/	Number of measurements Broj mjerenja	X ± SD [mm]	Centiles / Centile				
			5.	10.	50.	90.	95.
22	20	38,5±2,48	35,0	35,0	38,5	42,0	42,5
23	26	41,1±2,33	38,0	39,0	40,0	44,0	46,0
24	20	43,0±2,68	39,5	40,0	43,0	47,0	48,5
25	31	45,2±2,53	41,0	42,0	45,0	48,0	50,0
26	47	47,7±2,39	44,0	44,0	48,0	51,0	51,0
27	66	50,5±2,67	46,0	47,0	51,0	54,0	55,0
28	86	52,4±2,14	49,0	50,0	52,5	55,0	56,0
29	89	54,6±3,06	49,0	51,0	55,0	58,0	59,0
30	85	55,7±3,25	50,0	52,0	56,0	60,0	60,0
31	120	58,2±2,84	53,5	54,0	59,0	61,0	63,0
32	152	60,1±3,11	54,0	56,0	60,0	63,0	64,0
33	165	62,5±3,19	57,0	58,0	63,0	66,0	67,0
34	150	64,0±3,12	58,0	60,0	64,0	68,0	69,0
35	159	66,4±2,96	61,0	62,0	66,0	70,0	70,0
36	186	68,0±3,01	63,0	64,0	68,0	72,0	73,0
37	207	69,6±2,90	64,0	66,0	70,0	73,0	74,0
38	193	71,2±3,46	66,0	67,0	71,0	75,0	76,0
39	129	74,0±2,89	70,0	71,0	74,0	78,0	78,0
40	116	74,8±2,96	70,0	71,0	75,0	78,0	80,0
41	43	75,6±2,53	72,0	72,0	74,5	79,0	80,0

X ± SD – mean value ± standard deviation / srednja vrijednost ± standardna devijacija; n – number of measurements / broj mjerenja

tares Premium Edition, Siemens Medical Solutions USA, Inc, Mountain View, California, USA and Aloka SSD 5000 Pro Sound Tokyo, Japan ultrasound machines with transabdominal convex probes of 3.65 MHz were used. The gestational age was calculated according to the date of the last menstrual period and Naegele's rule, and it was verified by ultrasound finding in the first half of the pregnancy. When the difference in the gestational age, calculated according to the date of the last period with respect to the ultrasound report, ex-

Table 3. Mean values with standard deviation and centile values for abdominal circumference (AC) according to gestational age (n=2070)

Gestational age /weeks/ Gestacijska dob /tjedni/	Number of measurements Broj mjerenja	X ± SD [mm]	Centiles / Centile				
			5.	10.	50.	90.	95.
22	17	177,8±13,08	145,0	160,0	180,0	190,0	194,0
23	25	188,4±9,25	175,0	178,0	190,0	205,0	205,0
24	19	196,3±9,40	175,0	185,0	196,3	210,0	210,0
25	31	206,7±11,39	190,0	190,0	210,0	220,0	220,0
26	45	215,6±13,28	190,0	195,0	215,0	230,0	230,0
27	66	228,3±11,82	205,0	215,0	230,0	240,0	245,0
28	86	236,6±14,78	215,0	215,0	237,5	255,0	255,0
29	88	248,0±18,38	215,0	225,0	245,0	270,0	275,0
30	83	251,8±21,97	215,0	225,0	255,0	275,0	275,0
31	119	262,3±21,74	235,0	240,0	265,0	285,0	295,0
32	152	270,6±20,56	230,0	240,0	272,5	295,0	300,0
33	166	284,1±22,60	240,0	260,0	285,0	315,0	315,0
34	152	291,0±20,25	260,0	270,0	290,0	315,0	330,0
35	158	304,8±18,37	275,0	280,0	305,0	330,0	335,0
36	185	313,0±22,29	275,0	285,0	315,0	345,0	350,0
37	204	324,5±19,22	290,0	300,0	325,0	350,0	355,0
38	192	335,6±17,28	310,0	315,0	335,0	355,0	365,0
39	125	352,5±20,60	325,0	330,0	350,0	380,0	385,0
40	114	356,0±17,49	330,0	335,0	355,0	375,0	385,0
41	43	357,3±16,51	335,0	340,0	357,0	380,0	388,0

X ± SD – mean value ± standard deviation / srednja vrijednost ± standardna devijacija; n – number of measurements / broj mjerenja

Table 4. Mean values with standard deviation and centile values for transverse cerebellar diameter (TCD) according to gestational age (n=1847)

Gestational age /weeks/ Gestacijska dob /tjedni/	Number of measurements Broj mjerenja	X ± SD [mm]	Centiles / Centile				
			5.	10.	50.	90.	95.
22	17	22,8±0,95	22,0	22,0	22,5	25,0	25,0
23	23	24,4±1,02	23,0	23,0	24,5	26,0	26,0
24	20	25,7±1,24	24,0	24,0	25,8	27,5	27,5
25	29	27,2±0,64	26,0	26,0	27,0	28,0	28,0
26	45	28,6±1,37	27,0	27,5	28,5	30,0	30,5
27	64	30,5±1,40	29,0	29,0	30,0	33,0	33,0
28	83	31,9±1,32	30,0	30,0	32,0	33,0	34,0
29	86	33,6±1,84	31,0	32,0	33,0	35,0	36,0
30	77	35,3±1,54	33,0	33,0	35,0	37,0	38,0
31	107	37,2±1,70	35,0	35,0	37,0	39,5	41,0
32	134	39,1±1,53	37,0	37,0	39,0	41,5	42,0
33	148	41,6±1,71	39,0	40,0	41,8	44,0	44,0
34	135	43,4±1,46	41,0	42,0	43,5	45,0	45,5
35	137	45,1±1,55	42,0	44,0	45,0	47,0	47,0
36	163	46,7±1,21	45,0	45,0	47,0	48,0	48,5
37	187	48,4±1,40	46,5	47,0	48,4	50,0	51,0
38	171	49,8±1,45	48,0	48,0	50,0	51,0	52,0
39	99	51,6±1,45	49,0	50,0	52,0	54,0	54,0
40	93	52,7±1,19	50,0	51,0	53,0	54,0	54,0
41	29	53,3±1,51	51,0	52,0	53,0	55,0	55,0

X ± SD – mean value ± standard deviation / srednja vrijednost ± standardna devijacija; n – number of measurements / broj mjerenja

ceeded seven days, the gestational age, determined according to serial ultrasound examination, was regarded as applicable. It was additionally verified through a neonatal evaluation of the newborn's gestational age. Since this included routine ultrasound examinations during pregnancy, for which the pregnant women were referred to the Department, prior to the hospitalization, the patients signed a standard form "*Informed consent for medical treatment*". During the research basic ethical and bioethical principles were complied with (personal

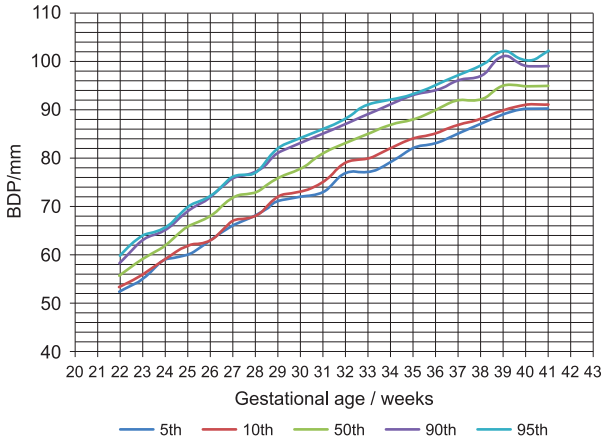

Figure 1. Centile curves for biparietal diameter (BPD) according to gestational age

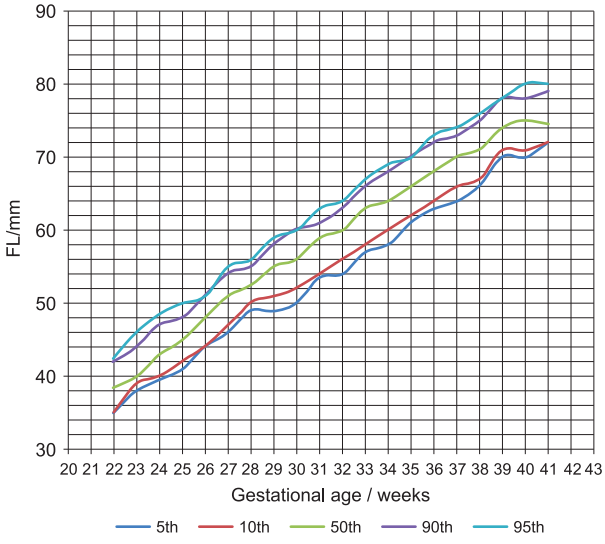

Figure 2. Centile curves for femur length (FL) according to gestational age

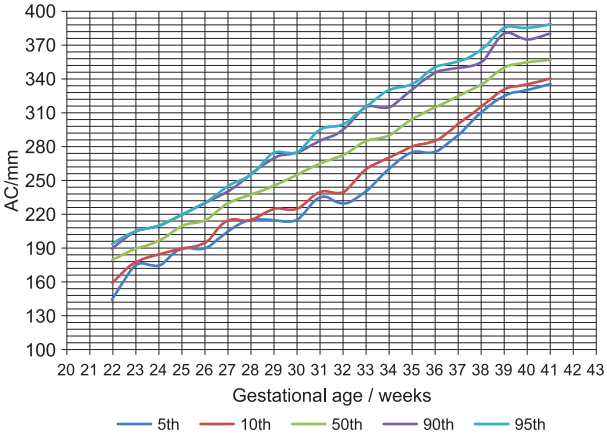

Figure 3. Centile curves for abdominal circumference (AC) according to gestational age

integrity, privacy, justice, beneficence and nonmaleficence) in accordance with the Nuremberg Code and the revised the Declaration of Helsinki. Application pro-

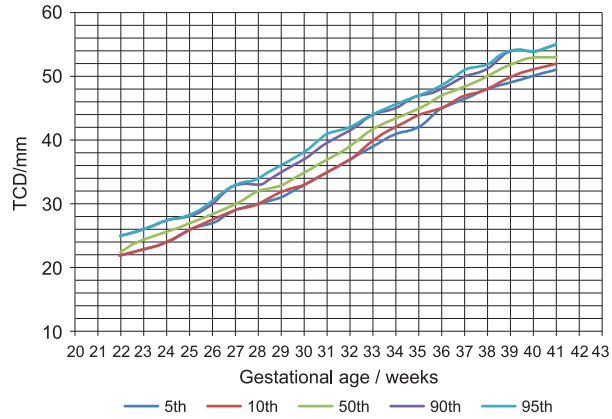

Figure 4. Centile curves for transversal cerebellar diameter (TCD) according to gestational age

gram Statistica 9.1 (StatSoft, INC.) was used to process and analyze gathered data. On the basis of all individual results of measured parameters, mean values were calculated as well as standard deviations and percentiles, which were shown according to gestational age. For the basic analysis of fetal biometric parameter measurement results, the descriptive statistics method was used for the establishment of mean values, standard deviations, standard errors, percentiles and ranges.

Results

From the total of 158,290 women in the County of Primorje and Gorski kotar, according to the population census of 2001, 40% of them were in the reproduction age between 15 and 44. At the Department of Gynecology and Obstetrics, Clinical Hospital Center Rijeka, during the nine-year research period from 1st January 2002 to 31st December 2010, four parameters of fetal growth were measured prospectively in a group of 1594 pregnant women. The total of 2728 ultrasound examinations was performed, since certain pregnancies clinically required serial ultrasound measurements, but for each pregnancy the maximum of three measurements were made in different gestational weeks. The most measurements were made for the 37th week of pregnancy for BPD and FL (n = 207), and the least for AC in the 22nd (n = 17) and 24th week (n = 19). The intra-observer variance was at the level of 1.5% for BPD and FL, and 2.8% for AC. The group of examined pregnant women included 54% of first pregnancies. The number of born male babies was 819 (50.8%), and of female babies 775 (49.2%). This data corresponds to the data of the papers on similar populations and it thus confirms it as a statistically representative sample. The average birth weight of the newborns in this group was 3239 g, and the birth length was 50 cm, while the median birth weights and lengths were 3320 g and 51 cm, respectively. Measurement results were shown for each gestational week numerically as the mean values with standard deviations and use of percentiles (5., 10., 50., 90., and 95. percen-

Table 5. Determination of gestational age according to measured values of biparietal diameter (BPD)

BPD (mm)	–2 SD (weeks+days) *(tjedni + dani)*	X (weeks+days) *(tjedni + dani)*	+2 SD (weeks+days) *(tjedni + dani)*
53	20+1	**22+0**	22+6
54	21+2	**22+1**	23+0
55	21+3	**22+3**	23+6
56	21+5	**22+4**	23+6
57	21+6	**22+5**	24+0
58	22+1	**23+0**	24+6
59	22+2	**24+0**	25+3
60	22+3	**24+1**	25+5
61	22+4	**24+2**	25+6
62	22+5	**24+5**	27+6
63	22+6	**25+3**	28+1
64	23+0	**25+4**	28+2
65	23+2	**25+6**	28+5
66	23+4	**26+0**	28+6
67	23+6	**26+6**	29+4
68	25+0	**27+0**	29+6
69	25+2	**27+1**	30+0
70	25+2	**27+5**	30+1
71	25+3	**28+2**	31+0
72	25+4	**28+3**	31+4
73	25+5	**28+6**	32+1
74	26+0	**29+1**	32+2
75	26+1	**29+3**	32+5
76	26+3	**29+5**	33+1
77	26+4	**30+2**	34+0
78	27+0	**31+4**	34+1
79	27+4	**32+0**	34+2
80	27+5	**32+1**	36+2
81	27+6	**32+2**	36+3
82	29+0	**32+3**	36+4
83	29+4	**33+1**	36+5
84	29+5	**33+2**	36+6
85	30+0	**33+6**	37+6
86	30+6	**34+5**	38+4
87	31+3	**35+1**	38+6
88	31+5	**35+4**	39+4
89	32+3	**36+0**	39+5
90	32+6	**36+3**	40+1
91	33+1	**37+0**	40+5
92	34+2	**37+4**	40+5
93	34+3	**37+5**	41+0
94	34+5	**38+1**	41+3
95	35+5	**38+4**	41+4
96	35+6	**38+5**	41+6
97	36+2	**39+1**	42+2
98	36+4	**39+2**	42+2
99	36+6	**39+4**	42+3
100	37+2	**39+6**	42+3
101	38+1	**40+2**	42+4

X ± SD – mean value ± standard deviation / srednja vrijednost ± standardna devijacija; n – number of measurements / broj mjerenja

Table 6. Determination of gestational age according to measured values of femur length (FL)

FL (mm)	–2 SD (weeks+days) *(tjedni + dani)*	X (weeks+days) *(tjedni + dani)*	+2 SD (weeks+days) *(tjedni + dani)*
35	21+0	**22+0**	23+0
36	21+1	**22+2**	23+2
37	21+2	**22+4**	23+6
38	21+4	**22+5**	24+0
39	21+5	**23+0**	24+3
40	21+5	**23+4**	25+3
41	21+5	**23+5**	25+4
42	21+5	**23+6**	25+5
43	22+1	**24+3**	26+4
44	23+3	**25+3**	27+2
45	23+3	**25+5**	27+5
46	23+4	**25+6**	28+1
47	23+5	**26+4**	29+3
48	23+6	**27+1**	29+4
49	24+5	**27+2**	29+5
50	24+6	**28+3**	30+5
51	25+5	**28+5**	30+6
52	25+7	**29+0**	31+1
53	26+3	**29+2**	31+3
54	27+1	**29+6**	32+6
55	27+3	**30+0**	33+3
56	28+0	**30+5**	33+4
57	28+1	**31+0**	34+0
58	28+2	**31+3**	34+4
59	29+2	**31+6**	34+5
60	29+2	**32+3**	35+4
61	30+2	**33+0**	35+4
62	30+5	**33+5**	36+5
63	30+5	**33+6**	36+6
64	31+3	**34+5**	37+6
65	31+3	**34+6**	38+2
66	32+5	**35+4**	38+4
67	33+2	**36+0**	39+0
68	33+2	**36+1**	39+1
69	33+6	**36+5**	39+4
70	34+2	**37+1**	39+6
71	35+3	**37+5**	40+0
72	35+5	**38+3**	40+1
73	36+0	**38+4**	40+2
74	36+5	**39+1**	40+6
75	37+3	**39+2**	41+1
76	37+5	**39+4**	41+4
77	37+6	**39+5**	41+6
78	38+0	**39+6**	41+6
79	38+1	**40+0**	41+6
80	38+5	**40+3**	42+1

X ± SD – mean value ± standard deviation / srednja vrijednost ± standardna devijacija; n – number of measurements / broj mjerenja

Table 7. Determination of gestational age according to measured values of abdominal circumference (AC)

OA (mm)	–2 SD (weeks+days) *(tjedni + dani)*	X (weeks+days) *(tjedni + dani)*	+2 SD (weeks+days) *(tjedni + dani)*
175	21+1	**23+1**	25+1
178	21+4	**23+2**	25+2
180	21+5	**23+4**	25+5
185	21+6	**23+5**	25+6
190	22+0	**24+2**	27+5
195	22+1	**25+0**	27+5
200	22+4	**26+4**	31+1
205	22+5	**26+5**	31+2
210	23+0	**26+6**	31+3
215	23+4	**27+5**	31+4
220	23+4	**27+6**	31+5
225	24+5	**28+2**	31+6
230	24+6	**28+5**	33+0
235	25+3	**29+2**	33+1
240	25+5	**29+5**	33+4
245	26+2	**30+2**	34+2
250	27+1	**30+3**	34+3
255	27+2	**30+5**	34+4
260	28+3	**31+4**	34+4
265	28+3	**32+0**	35+4
270	28+6	**32+2**	35+5
275	29+2	**33+0**	36+5
285	30+4	**34+0**	37+3
290	30+5	**34+1**	37+5
295	31+0	**34+4**	38+1
300	31+2	**34+6**	38+2
305	32+2	**35+3**	38+5
310	32+6	**36+1**	39+1
315	33+0	**36+2**	39+2
320	33+4	**36+4**	39+5
325	34+6	**37+3**	40+1
330	34+6	**37+4**	40+4
335	35+0	**37+6**	40+6
340	35+1	**38+3**	41+2
345	35+5	**38+4**	41+3
350	35+6	**38+5**	41+5
355	36+2	**39+1**	41+6
360	37+4	**39+4**	41+6
365	37+5	**39+5**	42+0
370	37+6	**39+6**	42+1
375	38+2	**40+1**	42+1
380	38+3	**40+4**	42+5
385	38+5	**40+5**	42+6
390	38+6	**40+6**	42+6

X ± SD – mean value ± standard deviation / srednja vrijednost ± standardna devijacija; n – number of measurements / broj mjerenja

tiles) and were presented in *Tables 1–4* and *Figures 1–4*. The results were additionally shown in a different form in *Tables 5 to 8* with an aim to determine gestational age more easily and more practically in everyday obstetric work.

Table 8. Determination of gestational age according to measured values of transverse cerebellar diameter (TCD)

TCD (mm)	–2 SD (weeks+days) *(tjedni + dani)*	X (weeks+days) *(tjedni + dani)*	+2 SD (weeks+days) *(tjedni + dani)*
22	21+0	**22+0**	22+6
23	21+0	**22+6**	25+0
24	22+1	**23+4**	25+0
25	22+3	**23+5**	25+0
26	22+5	**24+2**	25+6
27	24+2	**25+3**	26+5
28	24+2	**25+7**	27+5
29	25+4	**26+6**	28+1
30	26+0	**27+3**	28+6
31	26+4	**28+0**	29+3
32	27+0	**28+4**	30+0
33	27+3	**29+0**	30+4
34	27+5	**29+4**	31+2
35	28+4	**30+1**	31+6
36	28+6	**30+5**	32+4
37	29+6	**31+3**	33+1
38	30+2	**32+0**	33+5
39	31+2	**32+2**	33+5
40	31+2	**32+6**	34+6
41	31+5	**33+2**	34+6
42	31+5	**33+4**	35+5
43	32+4	**34+0**	35+5
44	33+0	**34+4**	36+1
45	33+3	**35+2**	37+1
46	33+5	**35+6**	38+0
47	35+1	**36+4**	38+1
48	35+3	**37+1**	38+6
49	36+2	**37+6**	39+2
50	36+3	**38+2**	40+0
51	36+7	**38+6**	40+6
52	37+4	**39+3**	41+3
53	38+3	**40+0**	41+4
54	38+5	**40+1**	41+4
55	38+5	**40+4**	42+6

X ± SD – mean value ± standard deviation / srednja vrijednost ± standardna devijacija; n – number of measurements / broj mjerenja

Discussion

The birth weight is one of the most important prognostic factors of the perinatal outcome due to which the supervision of fetal growth and its disorders plays an important role in contemporary obstetrics. In the contemporary era of antenatal care, the diagnosis of fetal growth disorders is not an accidental finding and result of uncertain evaluation, but it is rather an objective diagnosis based on exact measurements of the fetus' biometric characteristics. Numerous papers can be found in the literature, which indicate the statistically significant differences in biometric parameters of fetal growth between different populations of the world (8–13), and the goal of this prospective research was to form fetal growth curves for individual fetal biometric indicators

for our population of south-western Croatia. The clearly defined fetal growth curves would thereafter serve as reference results, i.e. data for comparison with equivalent results of other Croatian authors, as a prerequisite for the creation of unique standards of fetal growth for the entire Republic of Croatia. In fact, our everyday practical work so far usually included the use of data on fetal biometric parameters of American authors Hadlock et al. (1,2), from the second half of the 20th century. The standards of fetal growth allow perinatologists to follow with certainty the growth of the fetus in their population and to diagnose fetal growth disorders in a timely manner.

In addition to the practical significance of forming original tables containing values of fetal biometric characteristics, during the analysis of our results we noticed an interesting "correlation" between the measured values of AC expressed in centimeters (cm) and the data on gestational age expressed in weeks. In fact, in the period from the 28th to the 38th week of pregnancy, the gestational age could be very accurately determined by adding the number 5 to the values of AC expressed in centimeters. We have not found any similar observation by other authors and further studies are welcome.

Conclusion

Based on the results of the ultrasound biometric measurements in the population of pregnant women of south-western Croatia, we made original tables referring to fetal growth for individual fetal biometric characteristics for the domestic population. We have shown them numerically in the form of tables with the aim of applying them in everyday perinatological practice. Our wish is that this paper be an encouragement to perinatologists of other Croatian regions to do the same in their communities as a prerequisite for the creation of a unique standard fetal growth chart for the entire Republic of Croatia.

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OBILJEŽJA FETALNOG RASTA U POPULACIJI JUGOZAPADNE HRVATSKE

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Izvorni znanstveni članak

Ključne riječi: fetalna biometrija, fetalni rast, ultrazvuk, Republika Hrvatska

Sažetak. *Cilj.* Odrediti biometrijska obilježja domaće fetalne populacije i kreirati odgovarajuće krivulje fetalnog rasta. *Metode.* U devetogodišnjem razdoblju, od 1. siječnja 2002. godine do 31. prosinca 2010. godine, pregledano je ultrazvučno 1594 trudnica s jednoplodnom trudnoćom urednog tijeka i ishoda između 22. i 41. tjedna trudnoće. Ukupno je obavljeno 2728 pregleda. Mjereni su biparijetalni promjer, dužina femura, opseg abdomena i poprečni promjer malog mozga, a dobiveni rezultati prikazani su numerički u tablicama, pri čemu su korištene srednje vrijednosti sa standardnom devijacijom i centilne vrijednosti. *Rezultati.* Izrađene su izvorne tablice pojedinih biometrijskih obilježja fetalnog rasta za domaću populaciju jugozapadnog dijela Hrvatske.