

妊娠期妇女甲状腺功能减退对妊娠结局和胎儿影响的分析

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DOI: 10.3760/cma.j.issn.0254-6450.2016.05.028

【摘要】 目的 分析妊娠期妇女甲状腺功能减退(甲减)对妊娠结局和胎儿的影响。方法 选择 2013 年 1 月至 2015 年 10 月在上海市第八人民医院行产前检查并分娩的 4 286 例孕妇为研究对象,入组患者均在孕 10 周时行甲状腺功能检查,分为甲减、亚临床甲状腺功能减退(亚甲减)和健康 3 组,分析甲减发生状况及其对妊娠结局和胎儿的影响。**结果** 共检出甲减 209 例,发生率为 4.9%(209/4 286),其中临床甲减 85 例,亚甲减 124 例。健康组早产发生率(1.0%)明显低于甲减组(10.6%)和亚甲减组(6.5%),差异有统计学意义($\chi^2=38.884, P<0.001$; $\chi^2=17.722, P<0.001$);健康组贫血发生率(3.8%)明显低于甲减组(18.8%)和亚甲减组(9.7%),差异有统计学意义($\chi^2=30.949, P<0.001$; $\chi^2=23.275, P<0.001$);健康组低体重发生率(1.1%)明显低于甲减组(14.1%)和亚甲减组(4.8%),差异有统计学意义($\chi^2=50.593, P<0.001$; $\chi^2=15.637, P<0.001$);健康组胎儿窘迫发生率(1.9%)明显低于甲减组(10.6%)和亚甲减组(5.6%),差异有统计学意义($\chi^2=19.257, P<0.001$; $\chi^2=12.357, P<0.001$);健康组胎儿 Apgar 评分(9.69 ± 0.32)明显高于甲减组(9.25 ± 0.45)和亚甲减组(9.28 ± 0.44),差异有统计学意义($t=8.823, P<0.001$; $t=15.175, P<0.001$)。**结论** 妊娠期妇女甲减可对妊娠结局和胎儿构成不利影响,临床应加强妊娠期妇女相关检查,早发现早治疗。

【关键词】 甲状腺功能减退; 妊娠期; 分娩; 胎儿

基金项目: 上海市卫生与计划委员会课题(201440014)

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【Abstract】 Objective To investigate the influence of hypothyroidism on pregnancy outcome and fetus in pregnant women. **Methods** A total of 4 286 pregnant women, who received prenatal examination in our hospital from January 2013 to October 2015, were selected as study subjects. The incidence of hypothyroidism and the influence on pregnancy outcomes and fetus were investigated. **Results** In 4 286 pregnant women surveyed, 209 hypothyroidism cases were detected (4.9%), including 85 clinical hypothyroidism cases and 124 subclinical hypothyroidism cases. In health group, the premature delivery rate was 1.0%, significantly lower than that in clinical hypothyroidism group (10.6%) and in subclinical hypothyroidism group (6.5%), the differences were significant ($\chi^2=38.884, P<0.001$; $\chi^2=17.722, P<0.001$). In healthy group, the incidence of anemia was 3.8%, significantly lower than that in clinical hypothyroidism group (18.8%) and in subclinical hypothyroidism group (9.7%), the differences were significant ($\chi^2=30.949, P<0.001$; $\chi^2=23.275, P<0.001$). In health group, the incidence of low birth weight was 1.1%, significantly lower than that in clinical hypothyroidism group (14.1%) and in subclinical hypothyroidism group (4.8%), the differences were significant ($\chi^2=50.593, P<0.001$; $\chi^2=15.637, P<0.001$). In health group, the fetal distress incidence was 1.9%, significantly lower than that in clinical hypothyroidism group (10.6%) and in subclinical hypothyroidism group (5.6%), the differences were significant ($\chi^2=19.257, P<0.001$; $\chi^2=12.357, P<0.001$). In health group, the fetal Apgar score (9.69 ± 0.32) was significantly higher than

those in clinical hypothyroidism group (9.25 ± 0.45) and in subclinical hypothyroidism group (9.28 ± 0.44), the differences were significant ($t=8.823, P<0.001; t=15.175, P<0.001$). **Conclusion** Hypothyroidism during pregnancy has adverse influences on pregnancy outcome and fetus, and it is necessary to strengthen the hypothyroidism detection in pregnant women for the early treatment.

【Key words】 Hypothyroidism; Pregnancy; Labor; Fetus

Fund program: the Research Project of Shanghai Municipal Commission of Health and Family Planning (201440014)

甲状腺功能减退(甲减)是产妇妊娠期常见并发症,包括临床甲状腺功能减退(临床甲减)和亚临床甲状腺功能减退(亚甲减)。后者为甲减的一种特殊类型,临床上表现为游离型甲状腺激素(FT_4)水平正常,促甲状腺激素(TSH)水平升高。有研究报道^[1-2],妊娠期妇女甲减发生率约为8%,可影响患者脂肪、糖类代谢,威胁孕妇和胎儿的健康。为此本文以产前检查并分娩的4 286例孕妇为研究对象,对其甲减发生状况,及其对妊娠结局和胎儿的影响进行分析,结果报道如下。

对象与方法

1. 研究对象:为2013年1月至2015年10月在上海市第八人民医院行产前检查并分娩的4 286例孕妇,年龄19~36岁,平均(26.2 ± 3.2)岁;初产妇3 427例,经产妇859例;胎龄32~42周,平均(37.5 ± 2.9)周;体重52~79 kg,平均(61.5 ± 8.4) kg。

2. 甲减诊断标准:亚甲减为 FT_4 水平正常($12.0 \sim 22.0$ pmol/L), TSH水平升高(>4.20 mU/L);临床甲减为 FT_4 水平降低(<12.0 pmol/L), TSH水平升高(>4.20 mU/L)。并排除①严重心、肝、肾等疾病患者;②甲减病史患者;③严重孕期合并高血压和糖尿病患者。

3. 研究方法:查阅入选患者临床资料,调查记录孕妇妊娠期并发甲减情况,分为甲减组、亚甲减组和健康组,对比分析3组妊娠结局(早产、产后出血、胎盘早剥、贫血、前置胎盘)和胎儿不良结局(畸形、低体重、胎儿窘迫和5 min Apgar评分,以及产妇年龄、体重、产次、有无合并高血压和胎儿胎龄)。

4. 统计学分析:调查数据采用SPSS 13.0软件进行统计学分析;计数资料比较使用 χ^2 检验;计量资料用 $\bar{x} \pm s$ 表示,采用F检验和t检验; $P<0.05$ 为差异有统计学意义。

结 果

1. 一般情况:4 286名孕妇检出甲减209例,发生率为4.9%。其中85例临床甲减列为甲减组,124例为亚甲减组,4 077例健康孕妇为健康组。

3组孕妇间年龄、产次、胎龄、体重和高血压等一般资料比较,差异无统计学意义($P>0.05$),见表1。

表1 3组孕妇一般特征

组 别	年龄 (岁, $\bar{x} \pm s$)	产次(例数)		胎龄 (周, $\bar{x} \pm s$)	体重 (kg, $\bar{x} \pm s$)	高血压 例数
		初产	经产			
甲减($n=85$)	26.4 ± 3.0	69	16	37.3 ± 2.8	60.8 ± 8.7	7
亚甲减($n=124$)	26.1 ± 3.5	101	23	37.7 ± 3.3	61.8 ± 8.2	10
健康($n=4 077$)	26.1 ± 3.5	3 257	820	37.5 ± 2.2	61.9 ± 8.8	312

2. 妊娠结局:3组孕妇产后出血、胎盘早剥和前置胎盘发生率比较,差异无统计学意义($P>0.05$);健康组早产发生率(1.0%)明显低于甲减组(10.6%)和亚甲减组(6.5%),差异有统计学意义($\chi^2=38.884, P<0.001; \chi^2=17.722, P<0.001$);健康组贫血发生率(3.8%)明显低于甲减组(18.8%)和亚甲减组(9.7%),差异有统计学意义($\chi^2=30.949, P<0.001; \chi^2=23.275, P<0.001$)。见表2。

表2 3组孕妇妊娠结局

组 别	早产	产后 出血	胎盘 早剥	贫血	前置 胎盘
甲减($n=85$)	9(10.6) ^{a,b}	2(2.4)	0(0)	16(18.8) ^{a,b}	2(2.4)
亚甲减($n=124$)	8(6.5) ^a	2(1.6)	1(0.8)	12(9.7) ^a	2(1.6)
健康($n=4 077$)	41(1.0)	79(1.9)	10(0.5)	156(3.8)	45(1.1)

注:括号外数据为例数,括号内数据为发生率(%);^a与健康组比较, ^b与亚甲减组比较, $P<0.05$

3. 胎儿结局:3组孕妇胎儿畸形发生率比较,差异无统计学意义($P>0.05$);健康组低体重发生率(1.1%)明显低于甲减组(14.1%)和亚甲减组(4.8%),差异有统计学意义($\chi^2=50.593, P<0.001; \chi^2=15.637, P<0.001$);健康组胎儿窘迫发生率(1.9%)明显低于甲减组(10.6%)和亚甲减组(5.6%),差异有统计学意义($\chi^2=19.257, P<0.001; \chi^2=12.357, P<0.001$);健康组胎儿Apgar评分(9.69 ± 0.32)明显高于甲减组(9.25 ± 0.45)和亚甲减组(9.28 ± 0.44),差异有统计学意义($F=6.337, P<0.001; t=8.823, P<0.001; t=15.175, P<0.001$)。见表3。

讨 论

随着人们生活水平的不断提高,优生优育观念的提高和健康体检普遍需求,大多数产妇均会定期

表 3 3 组孕妇的胎儿不良结局

组别	畸形	低体重	胎儿窘迫	Apgar 评分($\bar{x} \pm s$)
甲减($n=85$)	0(0)	12(14.1) ^{a,b}	9(10.6) ^{a,b}	9.25±0.45 ^a
亚甲减($n=124$)	1(0.8)	6(4.8) ^a	7(5.6) ^a	9.28±0.44 ^a
健康($n=4\ 077$)	0(0)	45(1.1)	77(1.9)	9.69±0.32

注:括号外数据为例数,括号内数据为发生率(%);^a与健康组比较,^b与亚甲减组比较, $P<0.05$

进行身体检查^[3]。甲减是产妇妊娠期常见的并发症之一,其发生与多种因素有关,对产妇和胎儿造成不良影响^[4-6]。因此掌握妊娠期妇女甲减状况及其对妊娠结局和胎儿的影响,可为临床采取积极应对提供依据,对优生优育和产妇身体健康具有重要意义。

本次分析表明,产前检查的 4 286 名妊娠期妇女中甲减发生率为 4.9%,其中临床甲减占 40.7%,亚甲减占 59.3%,与其他文献报道一致^[7]。3 组孕产妇间年龄、产次、胎龄、体重和高血压等资料比较其差异无统计学意义($P>0.05$),具有可比性。3 组孕产妇产后出血、胎盘早剥和前置胎盘发生率比较的差异无统计学意义($P>0.05$),说明甲减或亚甲减可能与产后出血、胎盘早剥和前置胎盘等不相关。甲减组和亚甲减组的贫血和早产发生率明显高于健康组($P<0.05$),其原因可能与甲状腺激素功能有关。甲状腺激素具有促进造血功能的作用,当孕妇甲状腺激素水平低时,可引起其造血功能降低,导致血红蛋白水平下降,甚至贫血^[8]。3 组孕产妇胎儿畸形发生率比较其差异无统计学意义($P>0.05$),说明甲减或亚甲减可能与胎儿畸形无关。甲减组和亚甲减组低体重和胎儿窘迫发生率明显高于健康组($P<0.05$),而 Apgar 评分低于健康组($P<0.05$),说明正常的甲状腺激素水平可间接维持正常血液供给,避免胎儿出现不良反应,有利于胎儿正常发育。文献报道,甲状腺激素可通过胎盘进入胎儿体内,利于胎儿大脑发育和成熟,进而提高胎儿生命质量^[9-10]。

综上所述,妊娠期妇女甲减发生率较高,其对妊娠结局和胎儿可构成不利影响,不仅可威胁孕妇身体健康,而且影响胎儿的神经系统发育。

利益冲突 无

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(收稿日期:2015-12-30)

(本文编辑:张林东)