

妊娠高血压综合征的预测和预防

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内容提要 本文研究表明,利用孕中期的平均动脉压(MAP-2)和中医辨证可预测妊娠高血压综合征(妊高征)的发生,MAP-2 单项预测,其可靠率为50%左右,MAP-2 $\geq$ 12kPa且伴有肝肾阴虚者的妊高征发生机率为70%以上,说明妊高征的发生与孕中期的MAP和肝肾阴虚关系密切。对预测为阳性的424例孕妇给予预防性用药,其预防效果:中药优于西药,西药优于对照组, P 值均 <0.005 ,服中药后妊高征的发生率由50%左右降至14.5%左右,效果显著,且可推迟妊高征的发病时间,对母婴均无副作用。

关键词 妊娠高血压综合征 孕中期平均动脉压 肝肾阴虚

妊娠高血压综合征(妊高征)是最常见的妊娠合并症,孕产妇及围产儿病死率显著高于未得病孕妇,本文目的是在妊高征尚未产生前,采用中西医两法探索妊高征的“亚临床证候”以预测其发生,并在“亚临床阶段”对预测阳性者采取预防措施,明显地降低了妊高征的发病率及围产期母婴发病率和围产儿死亡率,现报道如下。

资料与方法

一、一般资料:1987年5月至1989年4月对以往无高血压、慢性肾炎等病的门诊孕妇,在初诊时(<24 孕周)测血压,根据Burton氏公式:

$$\text{平均动脉压(MAP-2)} = \frac{\text{收缩压} + \text{舒张压} \times 2}{3} \text{ 计}$$

算初检时MAP-2。MAP-2 <12 kPa(90mmHg)者210例(201例有中医辨证);MAP-2 ≥ 90 mmHg者424例(辨证377例),其中122例未服药,作为对照,另302例作为预防对象,对其中144例在孕中期作了血液流变性指标的测定。

二、方法

1. 诊断方法:妊高征的诊断和分类参考《实用妇产科学》^{〔1〕}。中医辨证依据全国第二届中西医结合妇产科学术会议制订的妊高征诊疗标准辨证分型^{〔2〕},在初诊时、孕28周、38周、产前和发病时各辨证一次。在整个孕期中按常规定期检测血压、尿蛋白及水肿情况,其中血压

由专人测量。测右臂,若MAP-2 ≥ 90 mmHg则休息一刻钟复测,以第二次为准。孕24周前初诊时MAP-2 ≥ 90 mmHg者为妊高征预测阳性。

2. 分组及预防性用药:将预测阳性的42例随机分为(1)对照组:122例,不服任何药物(2)施尔康预防组:102例,每天服施尔康1~2片;(3)中药预防甲组:100例,肝肾阴虚者服杞菊地黄丸,脾肾阳虚者服肾气丸,每次6g,每天2次;(4)中药预防乙组:100例,甲组药物加丹参片,每次3片,每日3次(有血瘀证者都纳入此组)。

服药时间:MAP-2 12~12.67kPa(90~95mmHg)者于孕24周起,MAP-2 ≥ 12.80 kPa(96mmHg)者于测定日起即服药。

结 果

一、MAP-2预测妊高征:MAP-2 <90 mmHg210例,未服任何药物,在整个孕期发生妊高征22例,妊高征的发生率为10.5%。MAP-2 ≥ 90 mmHg122例对照组中发生妊高征60例,发生率为49.2%,二组比较, $P<0.005$,表明孕中期MAP-2 ≥ 90 mmHg组的妊高征发病率显著高于 <90 mmHg组,提示通过孕中期平均动脉压的测量可预测妊高征的发生。

二、孕中期中医辨证与MAP-2及妊高征发病率的关系:孕中期共辨证578例,经统计分析,表明MAP-2 ≥ 90 mmHg组的异常证型发生

率明显高于MAP-2<90mmHg组,且以肝肾阴虚型为主(占异常证型的84.2%),脾肾阳虚次之(占12.4%),挟血瘀证者占3.4%。另外对MAP-2<90mmHg的201例(其中妊高征21例),对照组中的101例(其中妊高征52例)作过中医辨证的对象进一步分析,其肝肾阴虚与妊高征发病的关系为:(1)孕中期MAP-2≥90mmHg组(对照组)中肝肾阴虚证占40.6%(41/101),明显高于<90mmHg组(正常组)的24.4%(49/201)。(2)妊高征中肝肾阴虚占46.6%(34/73),明显高于非妊高征的24.5%(56/229)。

(3)肝肾阴虚证中妊高征发病率为37.8%(34/90)明显高于非肝肾阴虚证的18.4%(39/212)。(4)孕中期MAP-2≥90mmHg伴有肝肾阴虚时,妊高征的发病率高达70.7%(29/41)。

以上结果表明孕中期的MAP-2和中医辨证,特别是肝肾阴虚型与妊高征的发病关系密切,单项预测妊高征率为50%左右,而二项指标结合可使预测率提高到70%以上。

三、中西药预防妊高征的结果:对424例预测阳性的孕妇,其中302例给预防性用药,其预防效果见表1。

表1 424例中西药预防妊高征的结果〔例(%)〕

组别	例数	妊高征发病率	妊高征发病孕周			妊高征分类	
			<30周	30~36.6周	≥37周	轻中度	重度
对照	122	60(49.2)	27(45.0)	20(33.0)	13(22.0)	54(90.0)	6(10.0)
施尔康	102	31(30.4)	9(29.0)	10(32.3)	12(38.7)	29(93.5)	2(6.5)
中药甲	100	15(15.0)	3(10.3)	11(37.9)	15(51.8)	27(93.1)	2(6.9)
中药乙	100	14(14.0)					

1. 妊高征的发病率:中药和西药与对照组相比, $P<0.005$,表明中西药均能明显降低妊高征发生率;中药甲、乙组与西药相比, P 均 <0.005 ,表明中药预防效果比西药更显著;中药甲、乙组相比, $P>0.05$,差异不显著,说明加用丹参后并没有明显提高预防效果。

2. 妊高征的发病孕周:妊高征于30孕周前发病的比例对照组高于西药组,而西药组又高

于中药组, $P<0.05$;而孕37周以后发病的比例相反,中药组最高,说明预防用药后可推迟妊高征的发生。

3. 妊高征分类的构成比:中西药预防组的重度妊高征率低于对照组,但 $P>0.05$,差异无统计学意义。

4. 预防用药对母婴的影响:见表2。

对照组的早产儿、低体重儿、围产儿死亡

表2 预防性用药对母婴的影响

分组	例数	新生儿 平均体重 (g)	低体重儿	新生儿 总例 (%)	早产儿	围产儿 死亡 (例(%))	难产 (例(%))	阴道产平 均总产程 (h)
正常	210	3203	6(2.8)	11(5.2)	4(1.9)	2(9.5)	69(32.8)	8.75
对照	122	3243	6(4.9)	5(4.1)	10(8.2)	4(32.8)	41(33.6)	8.47
施尔康	102	3243	3(2.9)	10(9.8)	3(2.0)	0(0.0)	32(31.4)	8.50
中药甲乙	200	3281	8(4.0)	6(3.0)	17(8.5)	2(10.0)	68(34.0)	7.17

率均高于正常组,这与前者妊高征的发生率明显高于后者有关。妊高征预测阳性的各组比较,西药预防组的低体重儿、早产儿和围产儿死亡率最低;中药预防组比对照组新生儿平均体重重38g,阴道分娩的平均总产程短1小时左右,围产儿死亡率下降22.8%;其他方面三组无明

显差异。中西药预防组均无新生儿畸形,均未发生子痫。

讨 论

一、关于妊高征的预测率和预防效果:为预防妊高征的发生,国内外做了大量预测工作,

如孕中期平均动脉压、翻身试验、血管紧张素敏感试验、孕妇血清纤维结合蛋白(FN)含量测定⁽³⁾等方法预测妊高征的发生,预测率为50~86%^(4~6)。本文MAP-2单项预测率为50%左右结合中医辨证(肝肾阴虚)预测率可提高到70%以上,此方法简单,不需特殊仪器和设备,利于推广,尤其适用于基层医疗单位。本文对424例预测阳性者采用预防措施,结果表明中西药均有显著的预防效果,且中药优于西药,另外预防用中药的妊高征发病时间推迟,服药后对母婴均无副作用,又采用中成药,故易被孕妇接受。由于对预测阳性者采取了预防措施,使我院的妊高征率由1984~1986年的20%降至1987~1989年的11%左右,这表明通过预测和预防可进一步降低妊高征的发病率。

二、关于预防性用药的作用:文献报道妊高征患者辨证为肝肾阴虚者居多,其次为脾肾阳虚,本文资料表明孕中期异常证型也以肝肾阴虚为主,且与妊高征发病有关。杞菊地黄丸为滋阴补肾、治肝肾不足、阴虚阳亢的要药,而肾气丸功在温肾补脾,治肾阳不足兼补肾阴。在妊高征的“亚临床阶段”使用上述药物,阻断了肝肾阴虚或脾肾阳虚向肝旺及肝阳上亢方向发展,从而明显地降低了妊高征发病率并有效地预防痫证的发生,具体表现在以下三方面:

1. 药物的转证作用:本文预测阳性组中,对照组在孕中期共有259异常症项,预防用药组有698异常症项,在孕期中前者自然转证为49.8%,后者为58.1%,二组 P 值 <0.05 ,差异显著,这表明预防用药可促使异常证型的转化,从而降低妊高征的发生。

2. 活血化瘀药在预防妊高征过程中的作用:孕中期挟瘀血瘀证的仅占2.6%,为144例预测阳性的孕妇在孕中期作了血液流变性指标

的测定,其各项均值接近正常范围,表明孕中期血液粘滞性、高凝性及血细胞间聚集性改变不大,故中药预防组加丹参后妊高征率虽有所下降,但差异无统计学意义,因此孕中期无血瘀证者不必加活血化瘀药。

3. 已病防变的作用:我们对18例原发性高血压孕妇自孕中期起预防性用了上述中成药,其血压稳定在原有水平者有3例,有所下降或降至正常范围的有15例,均未合併妊高征。这表明上述中药亦起到了“未病先防,已病防变”的作用。

三、关于预防性用药的时间:有报道妊高征于孕20周前发病的占1.4%⁽⁷⁾,而我院的资料⁽⁴⁾表明孕21周前、孕24周前及孕24~28周发病的分别占0.2%、2%和7.48%,说明孕24周后发病渐上升,另外当MAP-2 ≥ 96 mmHg时,孕28周前发病的占18.4%以上,故我们认为MAP-2在90~95mmHg者于孕24周,MAP-2 ≥ 96 mmHg者于测定当天即开始预防性用药较为适当。

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· 简 讯 ·

中国医学科学院药用植物资源开发研究所协同中国老年报咸阳保健品厂及陕西咸阳抗衰老研究所、北京西洋参联合开发公司,于1991年5月19日在该所举行了“衰老对策学术研讨会”。会上陈可冀教授、肖培

根教授和张文高副教授分别作了“衰老机理及对策”、“内用保健药品及食品延缓衰老介绍”、“中医外用保健药品延缓衰老介绍”等学术报告。雷洁琼、王光英、焦若愚、钱信忠、彭佩云、何界生、张立平、顾方舟等六十余位同志应邀参加了这次会议。

(彭 勇)

and TXB_2 content were reduced in endometriotic cell, and the TXB_2 contents were reduced in endometrial cell in situ ($P < 0.01$). These results indicate that endometriotic cell and endometrial cell in situ can produce more PGI_2 and TXB_2 — at least in vitro, which perhaps may provide an explanation for the puzzling clinical phenomenon of endometriosis. Gossypol acetate, progesterone and danazol inhibit PGI_2 and TXB_2 content in endometrial cell of patients with endometriosis. It is pertinent to ask whether these drugs can be used to improve endometriosis-associated infertility or dysmenorrhea as well.

Key Words gossypol acetate, gonadotrophin releasing hormone agonist, endometriosis, prostaglandins

(Original article on page 527)

Prediction and Prevention of Hypertension Syndrome of Pregnancy

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Analysis of mean artery pressure (MAP-2) according to the differentiation of symptom complex of TCM can predict the occurrence of hypertension syndrome of pregnancy (HSP) at patients' first visit to hospital during their middle gestational period (< 24 pregnant weeks). 424 pregnant women (MAP-2 $\geq 12\text{kPa}$) were divided into 4 groups and given preventive treatment as follows: (1) The control group, 122 women, no drugs were given; (2) the Theragan group, 102 women; (3) the TCM (A) group, 100 women, those with Liver-Kidney deficiency of Yin(阴) or no apparent signs were given Qiju Dihuang Wan(枸菊地黄丸), and those with Spleen-Kidney deficiency of Yang(阳) were given Shenqiwan(肾气丸); (4) the TCM(B) group, 100 women, were given *Salvia miltiorrhiza* plus (A) group's drugs. The results of prediction: (1) The occurrence rate of HSP in the MAP-2 $< 12\text{kPa}$ group was 10.5%; in the MAP-2 $\geq 12\text{kPa}$ group, 49.2%. The difference was significant. (2) The rate of deficiency of Yin in the MAP-2 $\geq 12\text{kPa}$ was significantly higher than in the MAP-2 $< 12\text{kPa}$. The rate of HSP in the deficiency of Yin was higher than in the nondeficiency of Yin. The rate of HSP increased to 70.7% in the MAP-2 $\geq 12\text{kPa}$ with deficiency of Yin. The results of prevention: (1) The occurrence rates of HSP in 4 groups were 49.2%, 30.4%, 15% and 14% respectively. (2) There was no side effect for mother and infant after preventive treatment. No eclampsia occurred.

Key Words hypertension syndrome of pregnancy, mean artery pressure in middle gestational period, Liver-Kidney deficiency of Yin

(Original article on page 530)

Observation on Treatment of Hypertension Syndrome of Pregnancy with Ligustrazine

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75 patients with hypertension syndrome of pregnancy (HSP) were randomly designed to 2 groups: the control group treated with magnesium sulfate (20~25g/d) and the Ligustrazine (120~160mg/d) group. The results of Ligustrazine group compared with the control group were as follows: (1) Mean arterial pressure was significantly decreased ($P < 0.01$). (2) Edema and proteinuria was lowered ($P < 0.05$). (3) The condition of rheology was improved, especially, hematocrit was significantly decreased ($P < 0.001$). (4) The positive rate of NST and Apgar's score were not different between the 2 groups. Clinical monitoring showed Ligustrazine without side effects in the group. Mechanisms of Ligustrazine in HSP were (1) dilating blood vessel; (2) improving kidney function; (3) improving microcirculatory and rheology.

Key Words Ligustrazine, magnesium sulfate, hypertension syndrome of pregnancy

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