

# 中西医结合防治ABO新生儿溶血症

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**内容提要** 本文报道了用中西医结合的方法对既往有严重ABO新生儿溶血症妊娠或分娩史的孕妇及新生儿进行中药、蓝光照射、白蛋白、血浆等预防用药及治疗(孕妇自17周起服中药至分娩,新生儿娩出后即服预防性中药3天)。结果:服药前后新生儿溶血症的发病率由78.6%下降为26.3% ( $P < 0.005$ );患儿病死率由56.8%下降为0% ( $P < 0.001$ )。提示中西医结合防治本病,可明显降低发病率和病死率;即使发病,病情也轻;经长期随访无后遗症发生。

自1969年1月~1979年12月我们采用中西医结合的方法,对既往有重度黄疸、水肿或屡次流产的新生儿溶血症妊娠或分娩史的35名孕妇进行了防治,对其服药前、后新生儿发病情况、预防、治疗方法及中药作用机理等进行了探讨。

## 临床资料

病例选择标准:(1)孕妇既往有重度胎儿、新生儿溶血症妊娠及分娩史。(2)夫妇血型不同。本组孕妇34名血型为O型、1名为A型,其夫为A、B或AB型。(3)本次妊娠期间孕妇的血清免疫抗体A或B(抗A或B IgG)测定结果符合以下条件:①胶体介质法滴度大于1:512<sup>(1)</sup>。②定量修正IgG抗A(B)法效价 $\geq 1:64$ 者<sup>(2)</sup>。

本文选择符合以上标准的35名孕妇,服药前共妊娠78次,分娩56次(71.8%),流产22次(自然流产18次,人工流产4次)。18次自然流产分别发生在7名孕妇,其中流产6次者1名,3次、2次及1次者各2名。56次分娩中,娩出新生儿溶血症患儿(简称新溶儿)共44名,其中2名产妇各分娩新溶儿3次;7名各连续分娩新溶儿2次;15名初产妇分娩的15名新生儿皆为新溶儿;其余8名产妇共分娩16次,其中9次为新溶儿;其他3名产妇皆为流

产无分娩。本组产妇分娩的其他12名非新溶儿中,4名正常,8名因其他原因死亡。

## 治疗方法

### 一、预防处方

1. 活血化瘀中药:益母草500g 白芍180g 木香12g 当归、川芎各150g 共研细末,炼蜜为丸(每丸重9g),每次1丸,每日2次。自妊娠第17周或确诊后服至分娩。

2. 茵陈蒿汤:茵陈9g,茯苓6g,栀子、黄柏、郁金、泽泻、猪苓、白术、甘草各3g,大枣3枚。煎成60ml,每日3次,每次5ml。

3. 强地松2mg,每日3次,肝太乐50mg,每日3次。2、3项系新生儿出生后即服用,共服3天。

### 二、治疗处方

1. 凡新生儿经预防用药3天后病情仍继续进展、胆红素(改良Lathe's法) $\geq 12\text{mg/dl}$ 者为治疗用药的适应证。(1)茵栀黄注射液(市售,成份为黄柏、黄芩、黄连、茵陈、栀子、大黄)40ml,加等量5%葡萄糖液静脉滴注,每日1~2次或茵陈蒿汤口服,服法同上。(2)西药:强的松2~5mg,苯巴比妥钠0.003g,每日3次口服。血浆每日30ml,或白蛋白每日1g/kg,10%葡萄糖适量,静脉滴注。(3)蓝光照射<sup>(3)</sup>:用14盏40烛光的蓝光灯照射,将蓝光灯安置在特制的婴儿箱周围,再给婴儿佩带黑眼罩,放好

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尿布,裸体放于箱内。灯距婴儿30cm,箱内温度保持在30~31℃连续24小时,必要时可间歇数小时再照射24小时。避免照射过久以防皮肤青铜症及腹泻(照射停止后可自然消退)。

2. 具体用法,(1)胆红素<12mg/dl者17例,给与口服茵陈蒿汤、强的松、苯巴比妥或肝太乐;(2)胆红素在15~20mg/dl者9例,采用茵栀黄注射液,蓝光照射或血浆、白蛋白治疗;(3)胆红素>20mg/dl者1例,伴贫血(血红蛋白<12g/dl)、水肿、肝脾肿大、心力衰竭,除采用(2)组治疗方法外,于出生后第五天施行换血疗法<sup>(3)</sup>。

### 三、观察项目

孕妇服药前后免疫抗体的变化,新生儿的临床表现,血清IgG、血清胆红素的动态变化。

## 结 果

### 一、发病情况

服药前、后新溶儿的发病率分别为78.6%和26.3%,服药后38名新生儿中有新溶儿10例,与服药前所生的患儿数相比,经统计学处理 $P$ 值<0.005,有非常显著的差异。患儿病死率分别为56.8%及0%, $P$ <0.001。10名患儿总胆红素均>12mg/dl,平均总胆红素为17.5mg/dl(主要为间接胆红素),与孕妇服药前分娩的有胆红素记载的10名新生儿胆红素(平均总胆红素27.5mg/dl)相比,病情显然较轻,只有1名嗜睡1天、食欲欠佳2天。余28例为非新溶儿,其中无黄疸者8名,轻度黄疸者20名(胆红素均在12mg/dl以内)。38名新生儿血型(羊水测定法):A型16名,B型22名。经中西医结合防治后长期随访(3年5个月~13年,平均5年半),38名新生儿均发育良好无后遗症。

### 二、免疫抗体

35名孕妇服药前进行了免疫抗体测定,提示非新溶儿组及患儿组的母体免疫抗体(IgG)滴度均 $\geq 1:64$ ,两者间经统计学处理无显著差异,见附表。

附表 35名孕妇服药前后IgG滴度测定

		效				价			
		治 疗 前				合 计	治 疗 后		合 计
		1:64	1:128	1:256	1:512		上升	不变	下降
非新溶组	n	8	12	4	1	25	3	3	13
	%	32	48	16	4		15.8	15.8	68.4
患儿组	n	5	4	1	0	10	2	2	5
	%	50	40	10	0		22.2	22.2	55.6

用药后免疫抗体的动态变化从资料较全的28例中可见滴度下降者18例(64.3%),上升及不变者各5例(各占17.85%),而且非新溶儿组及患儿组其母体免疫抗体的动态变化无统计学意义。

## 讨 论

新生儿溶血症是一种同种被动免疫病<sup>(1)</sup>,它的病理生理变化是由于母子血型不合,因而母体内产生与胎儿相应的免疫抗体,通过胎盘进入儿体与红细胞凝集,使之破坏,导致溶血。根据免疫学的原理对本病的防治应采用免疫(抗体)抑制剂以中和母体的免疫抗体或抑制免疫抗体的产生。从中医的观点看,血液的凝集属于瘀血现象,应采取活血化瘀及理气的治则<sup>(4)</sup>。再者中医称新生儿黄疸为“胎黄”,系胎儿在子宫内秉受来自母体的湿热邪气蕴郁不解而发为黄疸,应投以清热利湿中药<sup>(5)</sup>。1972年作者与我院细菌免疫室合作进行了活血化瘀中药的动物实验,证明本处方对免疫抗体(IgG)有抑制作用,益母草的作用尤为显著。此外,这类药物对免疫抗体生成细胞也有抑制作用。因此我们对防治本症所采用的11味中药进行了血凝抑制试验及凝集素吸收抑制试验<sup>(6)</sup>,初步认为大黄、黄芩、益母草、茵陈、木香、白芍所含A、B血型物质(是一种半抗原,可中和免疫抗体)成分较高,其中大黄不单对ABO新生儿溶血症的免疫抗体的抑制作用显著,而且还对Rh型新生儿溶血症的抗D抗体有抑制作用。这为中药防治新生儿溶血症提供了理论依据。今后应继续筛选更多效价更高的中草药。

母体的免疫抗体与胎儿、新生儿发病的关系：根据上海生物制品研究所血型组<sup>(7)</sup>、polley氏<sup>(8)</sup>及本文结果均认为，ABO新生儿溶血症患儿，其母体的血清免疫抗体（IgG抗A或B抗体） $\geq 1:64$ ，但母亲的免疫抗体效价不能直接反应新生儿的免疫状态及发病情况。这与胎盘的屏障作用，新生儿红细胞的抗原性，胎儿血清中A、B血型物质的多少有关<sup>(2)</sup>。

本文作了羊水胎儿血型测定<sup>(9)</sup>。通过羊水测定，在妊娠3个月以后即可确定胎儿血型。除少数胎儿血型物质属非分泌型者外，用羊水测胎儿血型是一种准确、简单的测定方法，其符合率为100%。从而避免了盲目服药（如胎儿与母亲血型相同）。

本文采用中西医结合的方法对ABO新生儿溶血症进行了防治。重在预防，无论从减低发病率、病死率以及提高存活率等方面都有非常

显著的效果，经长期随访无1例有后遗症。

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## 应用TDP辐射仪和气功外气治疗第三腰椎横突综合征的临床疗效观察

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应用特定电磁波(简称TDP)辐射仪和气功外气, 治疗64例第三腰椎横突综合征获满意疗效, 报道如下。

**一般资料** 64例中男性43例, 女性21例。年龄最大者48岁, 最小者27岁, 平均年龄为34岁。病史最长21年, 最短4个月, 平均5年。有明显腰部损伤史者42例。64例患者皆有明显腰痛, 其中38例合并臀部疼痛。体征: 第三腰椎横突部位均有明显压痛, 其中38例髂嵴下缘臀中肌, 臀小肌起点处亦有明显压痛。53例行腰椎摄片, 均无异常。

**治疗方法** 患者取俯卧位, 气功师先以双手劳宫穴对准第三腰椎横突发放外气并进行气功按摩10分钟, 然后用TDP辐射仪照射第三腰椎横突部位60分钟(照射时辐射板与第三腰椎间距为35~40cm) 每日1次, 10次为1疗程。治疗2~4个疗程。

**结 果** 显效: 49例占76.6%(自觉症状和临

床体征消失或明显好转)。有效: 15例占23.4%(自觉症状和临床体征好转, 偶有腰部不适感)。总有效率达100%。

**讨 论** 第三腰椎横突综合征亦称腰肌筋膜炎或肌肉风湿病。是由于急性损伤处理不当或慢性损伤引起横突周围瘢痕粘连, 筋膜增厚, 肌腱膜挛缩等, 致使穿过横突处的腰深筋膜或穿出髂部的浅筋膜处的神经、血管长期受到压迫, 而引起的一系列临床表现。TDP辐射仪用于第三腰椎横突综合征, 可促进局部血液循环, 增强病理代谢产物的清除, 另外热效应有局部镇痛作用。通过气功师发放外气行气功按摩以疏通经络, 调和气血, 有助于横突周围瘢痕粘连的松解和肌张力的松弛, 神经血管束受压迫的现象容易解除。

先施气功外气再用TDP仪照射时有一股热流向深部组织渗透感, 治疗后患者感到腰部特别舒服, 与单用TDP仪治疗比较: 疼痛消失快, 能缩短病程。



## Abstracts of Original Articles

### Comparison of the Effects of Tonifying Kidney and Invigorating Spleen Regimen in Delaying Aging Changes

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Both the prescriptions of tonifying Kidney and invigorating Spleen were highly praised among all the aging delaying prescriptions in TCM, but it was conflicting viewed by different schools that which regimen was the better one. For answering this question, 90 healthy elder subjects were selected and were divided into three groups at random: (1) treated with tonifying Kidney regimen (TKR), (2) treated with invigorating Spleen regimen (ISR), and (3) controls. Before and after the treatment, their neuroendocrine and immune functions were simultaneously measured. The results showed that the activity of NK cell in the elderly group was higher than that in the youngsters and it could be further increased after the treatment in all these cases but the controls, which suggested that TKR and ISR had the effect of improving the nonspecific immune function. Early in 1984, TKR could improve the aging changes of the function of the hypothalamus-pituitary-testes axis was found. It raised the serum testosterone level and increased the response ability of pituitary to the stimulation of LH-RH. These effects were not observed in the control and ISR groups. In this article, the levels of serum LH and plasma cortisol were increased markedly in TKR group while the LH level was slightly increased and the cortisol level remained unchanged in ISR group were observed. All these data suggested that the effects of TKR were more significant and wider in application in delaying aging changes than that of ISR.

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### Prophylaxis and Treatment of Neonatal ABO Hemolytic Disease by TCM-WM Therapy

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Both Chinese herbal medicine and Western medicine were administered for prevention and treatment of the neonatal hemolytic disease by giving the herbal medicine of promoting the blood circulation and relieving the stasis as well as regulating the Qi (气) prescription composed of *Leonurus heterophyllus*, *Ligusticum wallichii*, *Paeonia alba*, *Angelica sinensis* and *Saussurea lappa*, making in pills to 35 pregnant women who had the history of delivering the "yellow baby" previously. It was given from 17th weeks of pregnancy up to the delivery. As for the blood group of the mothers, 34 of them were group "O", only one belonged to group "A". The titer of their serum anti-A(B) IgG were  $> 1:64$ . Meanwhile, the blood group of the fetuses were different from their mothers. Changes of the serum anti-A(B) IgG titer were followed monthly during the medication. 38 newborns were delivered by 35 mothers with one pair of twin, 2 mothers delivered twice. Cord blood bilirubin, anti-A(B) IgG titer, hemoglobin, blood group of the newborns were examined immediately after delivery. Another group of herbal medicine with the effect of clearing up the heat and removing the dampness such as *Artemisia scoparia*, *Gardenia jasminoides*, *Scutellaria baicalensis*, while several kinds of Western medicine of liver protection as luminal, glucurrolactone, prednisone were administered orally just after the birth for three days for prophylaxis. Meanwhile, the changes of symptoms and signs as well as laboratory findings of the newborns especially serum bilirubin were followed closely. The principles and methods of combined treatment according to the severity of disorders were demonstrated. Intravenous infusion of Chinese herbal medicine for clearing up the heat and removing the dampness, and supplemented with Rhubarb, photo-therapy, albumin infusion, exchange transfusion etc. were given. Comparison of the morbidity and mortality between the two groups of newborns before and after the combined therapy who were delivered by the same group of mothers showed the morbidity rates were 78.6% and 26.3%; mortality rates 56.8% and 0% respectively, which were significant statistically. The severity of the disturbance of the newborn patients after the medication, 9 of them were mild, only one was rather severe with the bilirubin peak value of 22.3 mg/dl and was cured by exchange transfusion. There were no sequelae in the medication group after long-period follow-up. The mechanism of the pathogenesis was discussed from both the TCM and the WM point of view. Immunological test on mature mice were done after taking drugs. The titer of anti-A(B) IgG were decreased dramatically especially in the herbal group. Human serum immunological inhibition test and agglutinin absorption test demonstrated some drugs among the blood circulation promoter and stasis reliever, as well as heat and dampness remover served as immunological inhibitor, thus, offering the theoretical basis of the treatment for this disease.

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