

DOI: 10.13241/j.cnki.pmb.2014.03.045

饮食提示卡在经皮冠状动脉介入治疗术后患者中的应用

范文静¹ 宋淑平^{2△} 郭晓霞² 张舒¹ 张颖¹ 李明波¹

(1 哈尔滨医科大学附属第四医院心内科 黑龙江 哈尔滨 150001;

2 哈尔滨医科大学附属第四医院护理部 黑龙江 哈尔滨 150001)

摘要 目的:探讨饮食提示卡在经皮冠状动脉介入治疗(PCI)术后患者护理中的临床效应。**方法:**选取 62 例冠心病行 PCI 治疗后患者,随机分为对照组和试验组,各 31 例。对照组采用常规护理,试验组在对照组的基础上采用饮食提示卡进行护理干预,比较两组患者血压、血脂、血糖的控制情况,饮食知识的知晓率,治疗的依从性以及护理的满意度。**结果:**实施干预后,试验组血压、血脂、血糖的控制率优于对照组($P<0.05$),饮食知识知晓率高于对照组($P<0.01$),治疗的依从性与护理的满意度优于对照组($P<0.01$)。**结论:**饮食提示卡能使 PCI 术后患者对危险因素进行有效地控制,提高对知识的掌握,增加治疗的依从性,提高护理质量。

关键词: 饮食提示卡;经皮冠状动脉介入术;健康教育;护理观察

中图分类号: R473.5, R541.4 **文献标识码:** A **文章编号:** 1673-6273(2014)03-564-03

Application of Diet Suggesting Cards on Patients Undergoing Percutaneous Coronary Intervention

FAN Wen-jing¹, SONG Shu-ping^{2△}, GUO Xiao-xia², ZHANG Shu¹, ZHANG Ying¹, LI Ming-bo¹

(1 Department of cardiology, Forth Affiliated Hospital of Harbin Medical University, Harbin, Heilongjiang, 150001, China;

2 Department of nursing administration, Fourth Affiliated Hospital of Harbin Medical University, Harbin, Heilongjiang, 150001, China)

ABSTRACT Objective: To evaluate the effects of diet suggesting cards on patients undergoing percutaneous coronary intervention (PCI). **Methods:** 62 cases were randomly divided into the control and experimental group, and 31 cases were in each group. The patients in the control group received routine nursing care, and those in the experimental group were based on the use of diet suggesting cards for nursing intervention. The control of blood pressure, lipid, blood glucose and the rate of grasping dietary knowledge were observed. The treating compliance and satisfaction of nursing in the two groups were contrasted before and after intervention. **Results:** After intervention in the experimental group, the control degree of blood pressure, lipid, blood glucose were superior to that in contrasting group ($P<0.05$), the rate of grasping dietary knowledge was higher than another ($P<0.01$). The treating compliance and the satisfaction of nursing in experimental group were superior to that in the contrasting group ($P<0.01$). **Conclusion:** Diet suggesting cards could help patients to control the risk factor effectively, increase the rate of grasping dietary knowledge and treating compliance, which would enhance the quality of nursing.

Key words: Diet suggesting cards; Percutaneous coronary intervention; Health education; Nursing observation

Chinese Library Classification(CLC): R473.5, R541.4 **Document code:** A

Article ID: 1673-6273(2014)03-564-03

前言

冠状动脉性心脏病(CHD)简称冠心病,是由于冠状动脉狭窄、心肌供血不足引发的心脏功能及器质性病变,近年来,CHD 发病呈上升趋势。经皮冠状动脉介入治疗(PCI)已成为治疗 CHD 的主要方法之一^[1]。PCI 属微创治疗,具有创伤小、恢复快等优点,国内广泛开展,提高了冠心病患者的生存率。饮食与冠心病治疗的关系密切^[2-4],低盐、低脂、高膳食纤维的平衡膳食可协助药物治疗,有益于降低体质量和血脂^[5]。研究显示,PCI 术后患者合理饮食依从性较差,58.3%的患者不能进行合理饮

食^[6]。因此,对患者进行有效地饮食健康教育具有十分重要的临床意义。传统的健康教育存在方式单一、影响力不足等缺点^[7]。饮食提示卡比较直观,内容丰富,能够克服传统宣教的不足。我院采用饮食提示卡对 PCI 术后患者进行护理干预,控制了危险因素,提高了治疗的依从性及护理质量,取得了良好的实施效果,现报道如下。

1 资料与方法

1.1 临床资料

1.1.1 病例纳入标准 ①年龄小于 60 岁;②初次行 PCI 治疗;③初中以上文化程度,能够正确的使用饮食提示卡;④签署知情同意书,能接受随访观察;

1.1.2 排除标准 ①合并有严重心脏并发症;②合并有其他重要脏器病变,严重内分泌功能紊乱及精神类疾病病患者。

1.1.3 一般临床资料 选取 2011 年 12 月~2012 年 10 月住院

作者简介:范文静(1973-),女,主管护师,研究方向:心内科护理,
E-mail: fanwenjing1973@126.com

△通讯作者:宋淑平, E-mail: songshuping99@126.com

(收稿日期:2013-04-28 接受日期:2013-05-24)

行PCI患者62例,按随机数字表法将患者随机分成对照组和试验组,各31例。两组患者一般状况无明显差异,见表1。

表1 两组患者临床基本资料比较(例,100%)

Table 1 Clinical data comparison between patients of the two groups (n,100%)

Item	Control group (n=31)	Experimental group (n=31)	P
Sex (M/F)	21/10	20/11	>0.05
Age (year, $\bar{x} \pm s$)	44.3 $\pm$ 10.5	44.7 $\pm$ 11.1	>0.05
Marriage perfectly	25(80.64)	23(74.19)	>0.05
Smoke	20(65.51)	22(70.96)	>0.05
Drink	17(54.83)	18(58.06)	>0.05
Type 2 diabete smellitius	14(45.16)	12(38.70)	>0.05
Hhyperlipemia	19(61.29)	20(65.51)	>0.05
Hypertension	19(61.29)	17(54.83)	>0.05

1.2 方法

1.2.1 一般护理 告知患者早期平卧休息,待心肺功能恢复后,鼓励患者进行适当活动,避免用力过度。叮嘱患者养成良好的生活习惯,多饮水,食用富含纤维素的水果、蔬菜等,加快排泄造影剂。监测心电图、血压的变化,告知患者长期服药的必要性及意义。委婉的劝慰患者,减轻患者焦虑、抑郁情绪,与家属沟通,获取家庭支持。

1.2.2 试验组 在对照组的基础上采用饮食提示卡进行健康教育,提示卡分为住院提示卡和出院提示卡两种。①住院提示卡。卡片最上层标注姓名、床号、主管医生、主管护士等内容。卡片中间为主体内容,以表格的形式标注饮食宣教的内容。横格题目为:您应选择的饮食、饮食类别、饮食特点、食物举例、备注。纵格为饮食性质,题目包括:普通饮食、流食、低盐低脂饮食等内容。按照饮食要求,结合烹饪方法、在卡片背面列举具体食物的搭配。②出院提示卡^[10]。内容主要由5个部分组成:患者基本情况。包括患者的姓名、性别、年龄、身高、实际体重、标准体重。标注计算公式,按照标准体重计算出每日的热量需要量。对日常生活中常用食品所含热量进行标注,科学的按照规定进食食物。例举常见食谱,引导患者饮食注意多样化,平衡营养。干预4周后进行效果评价。

1.3 评价方法比较

1.3.1 血压、血脂、血糖的控制率 血压、血脂、血糖指标控制率参照患者出院时的控制标准,未恶化为有效,反之为无效。

1.3.2 饮食知识的知晓率 采用自行设计的饮食知识知晓率调查表进行评估,内容包括:①CHD饮食特点;②CHD饮食标准,包括标准体重热量的换算;③常见食品的热量等级。本问卷的专家效度CVI为0.72,内部一致性系数Cronbac's α 为0.81。

1.3.3 饮食治疗的依从性 根据冠心病饮食自我效能量表(CDSE)改编,包括社会情境下的饮食、健康饮食技能、饮食行为控制3个维度,共12个题目。每个题目分不能依从、偶尔依从、基本依从、完全依从4个等级,按1~4分计分,得分越高,依从性越好。本问卷的专家效度CVI为0.74,内部一致性系数

Cronbac's α 为0.85。

1.3.4 护理满意度 该问卷由作者自行设计,包括服务态度、护理业务、沟通交流、护理氛围、问题解答、总体评价6个维度,共12个题目。每个题目分不满意、基本满意、满意3个等级,按1~3分计分,得分越高,满意度越好。本问卷的专家效度CVI为0.81,内部一致性系数Cronbac's α 为0.85。

1.4 统计学处理

应用SPSS 17.0统计软件进行数据分析,计数资料采用 χ^2 检验,计量资料采用t检验,以 $P<0.05$ 为差异有统计学意义。

2 结果

2.1 两组患者干预后血压、血脂、血糖的控制情况

干预后,试验组患者血压、血脂、血糖的控制率明显优于对照组($P<0.05$)。见表2。

表2 两组患者血压、血脂、血糖的控制率比较(n,100%)

Table 2 Comparison of blood pressure, blood glucose, lipid between patients of the two groups(n, 100%)

Group	n	Blood pressure	Lipid	Blood glucose
Experimental group	31	22(70.96)	15(48.38)	20(64.51)
Control group	31	14(45.16)	7(22.58)	12((38.70)
χ^2		4.24	4.51	4.13
P		<0.05	<0.05	<0.05

2.2 两组患者干预前后饮食知识知晓率比较

两组患者干预前饮食知识的知晓率比较无显著差异($P>0.05$),干预后两组患者对饮食知识的知晓率均有所提高($P<0.01$),但试验组对饮食知识的掌握程度高于对照组($P<0.01$)。见表3。

表3 两组患者干预前后饮食知识知晓率比较(n,100)

Table 3 The dietary knowledge rate before and after intervention between the two groups

Group	n	Before intervention	After intervention	χ^2	P
Experimental group	31	5(16.13)	30(96.77)	41.01	
Control group	31	6(19.35)	17(54.83)	8.36	<0.01
χ^2		0.11	14.86		<0.01
P		>0.05	<0.01		

2.3 两组患者干预前后饮食治疗依从性比较

两组患者干预前饮食治疗依从性比较无明显差异($P>0.05$);干预后两组患者对饮食治疗的依从性均有所提高($P<0.01$),但试验组治疗依从性高于对照组($P<0.01$)。见表4。

表4 两组患者干预前后治疗依从性比较($\bar{x} \pm s$)

Table 4 The treating compliance before and after intervention between the two groups

Group	n	Before intervention	After intervention	t	P
Experimental group	31	24.24 $\pm$ 5.16	35.14 $\pm$ 5.84	7.787	0.000
Control group	31	24.75 $\pm$ 5.42	29.52 $\pm$ 5.34	3.490	0.000
t		0.379	3.954		
P		0.705	0.000		

2.4 两组患者干预前后护理满意度比较

两组患者干预前护理满意度比较无显著差异($P>0.05$)。干预后试验组护理满意度明显升高,与干预前比较差异显著($P<0.01$);对照组干预前后无变化($P>0.05$)。见表5。

表5 两组患者干预前后护理满意度比较($\bar{x} \pm s$)

Table 5 The satisfaction of nursing before and after intervention between the two groups

Group	n	Before intervention		After intervention		t	P
Experimental group	31	23.25±5.35	33.42±5.68	7.256	0.000		
Control group	31	23.37±5.39	24.17±4.85	0.614	0.541		
t		0.088	6.895				
P		0.930	0.000				

3 讨论

随着经济发展,人们的工作压力增大,饮食结构不合理,缺少运动,及人口老龄化等因素,CHD发病率逐年上升,成为影响人们正常工作及生活的主要疾病之一^[1]。每年约15%~32%的死亡因冠心病引发猝死,目前,行经皮冠状动脉介入治疗(PCI)疗效确切,临床上广泛应用。饮食结构是影响CHD以及PCI术后预后的重要因素^[12-15],研究显示,患者知识相对匮乏,患者没有从根本上明白饮食控制与冠心病及PCI术后的控制关系。对于饮食,至于何为低脂低盐,如何分配三餐,食物的宜与忌,则一知半解,有的甚至有错误的认识^[16]。张淑峰的研究表明采用改良的健康饮食可显著地降低血胆固醇浓度和冠心病的发病率,因而对冠心病患者加强饮食护理是非常必要的^[17]。冠心病患者经皮冠状动脉介入治疗后遵医行为往往较差,必须建立长期有效的干预机制,提高患者的遵医行为^[18]。

饮食提示卡,通过精巧的设计与承载着丰富的内容,将健康教育进一步具体化,是健康教育新的形式。饮食提示卡在临床上也较常用,冯曲丽等应用饮食提示卡对食管癌患者进行围手术期的健康教育,结果显示患者饮食知识的知晓度达到96%,对护士饮食健康教育的满意度达到97%^[19]。余珍燕等^[9]应用饮食温馨提示卡对腹部术后患者进行健康教育,饮食温馨提示卡提高了患者及家属对饮食的知晓率及满意度,患者可以及时合理补充营养,有利于胃肠功能的恢复,可以促进患者早日康复。本次研究显示,实施干预后,试验组血压、血脂、血糖的控制率优于对照组($P<0.05$),试验组对饮食知识的掌握程度高于对照组($P<0.01$),试验组治疗依从性高于对照组($P<0.01$);试验组护理满意度明显升高,与干预前比较差异显著($P<0.01$)。

饮食提示卡一般由基本信息与提示内容组成,将健康教育与提醒功能有机的结合。临床上应用饮食提示卡,一方面提醒患者注意饮食治疗的重要性,按要求进行饮食,提高治疗的依从性;另一方面,通过饮食提示卡,提升护理质量,更好的服务于临床。本次研究采用饮食提示卡对PCI术后患者健康教育进行探索性研究,显示使用饮食提示卡能够提高患者对疾病危险因素的控制、对知识的掌握及护理满意度。若重复证明饮食提示卡的应用效果,将是对目前健康教育模式的良好补充,最大程度的利用医疗资源,将产生一定的社会和经济效益。

参考文献(References)

- [1] 刘健,丛洪良. 冠心病介入治疗的进展 [J]. 医学综述, 2008, 14(16): 2512-2516
Liu Jian, Cong Hong-liang. Progress of Interventional Therapy for Coronary Artery Disease [J]. Medical Recapitulate, 2008, 14(16): 2512-2516
- [2] De Goede J, Geleijnse JM, Boer JM, et al. Linoleic acid intake, plasma cholesterol and 10-year incidence of CHD in 20,000 middle-aged men and women in the Netherlands[J]. Br J Nutr, 2012, 107(7):1070-1076
- [3] Burger KN, Beulens JW, Boer JM, et al. Dietary glycemic load and glycemic index and risk of coronary heart disease and stroke in Dutch men and women: the EPIC-MORGEN study [J]. PLoS One, 2011, 6(10): e25955
- [4] Flight I, Clifton P. Cereal grains and legumes in the prevention of coronary heart disease and stroke: a review of the literature [J]. Eur J Clin Nutr, 2006, 60(10): 1145-1159
- [5] Truswell AS. Cereal grains and coronary heart disease [J]. Eur J Clin Nutr, 2002, 56(1): 1-14
- [6] Ward HA, Keogh R, Lentjes M, et al. Fibre intake in relation to serum total cholesterol levels and CHD risk: a comparison of dietary assessment methods[J]. Eur J Clin Nutr, 2012, 66(3): 296-304
- [7] 李秀清. 饮食治疗冠心病疗效观察[J]. 北华大学学报(自然科学版), 2005, 6(4): 343-344
Li Xiu-qing. Effect of Dietetic treatment on coronary heart disease[J]. Journal of Beihua University(Natural Science), 2005, 6(4): 343-344
- [8] 陈恒. PCI术后冠心病患者生活方式依从性调查分析及护理对策[J]. 中国社区医师(医学专业), 2012, 14(22): 315
Chen Heng. Investigation of lifestyle Compliance and nursing countermeasure on patients of CHD undergoing percutaneous coronary intervention[J]. Chinese Community Doctors, 2012, 14(22): 315
- [9] 余珍燕, 区正红, 孔容冰. 饮食温馨提示卡在腹部术后患者健康教育中的应用[J]. 现代临床护理, 2010, 9(6): 37-39
Yu Zhen-yan, Ou Zheng-hong, Kong Rong-bing. Application of dietary reminder cards on health education with abdominal postoperative patients[J]. Modern Clinical Nursing, 2010, 9(6): 37-39
- [10] 阎霞. 糖尿病饮食治疗卡的设计及临床应用 [J]. 中国实用护理杂志, 2006, 22(6): 20-21
Yan Xia. Design and application of diet therapy card on patients of diabetes mellitus[J]. Chin J Prac Nurs, 2006, 22(6): 20-21
- [11] 郭东梅, 胡蓉, 赵郑波, 等. 重庆地区冠心病危险因素分析[J]. 重庆医科大学学报, 2012, 37(4): 350-354
Guo Dong-mei, Hu Rong, Zhao Zheng-bo, et al. Analysis on risk factors for coronary heart disease in Chongqing area [J]. Journal of Chongqing Medical University, 2012, 37(4): 350-354
- [12] De Lorgeril M, Salen P. Mediterranean diet in secondary prevention of CHD[J]. Public health nutrition, 2011, 14 (12A): 2333-2337
- [13] Hardcastle S, Taylor A, Bailey M, et al. A randomised controlled trial on the effectiveness of a primary health care based counselling intervention on physical activity, diet and CHD risk factors[J]. Patient education and counseling, 2008, 70 (1): 31-39
- [14] Dilis V, Katsoulis M, Lagiour P, et al. Mediterranean diet and CHD: the Greek European Prospective Investigation into Cancer and Nutrition cohort [J]. The British journal of nutrition, 2012, 108 (4): 699-709

- Recombinant Proteins Produced by Stable CHO Cell Clones can be Predicted by Transient Expression in HEK Cells [J]. *Molecular Biotechnology*, 2012: 1-7
- [5] Reichert J M. Marketed therapeutic antibodies compendium [C]. *MAbs*, 2012, 4(3): 413-415
- [6] Kishida T, Asada H, Kubo K, et al. Pleiotrophic functions of Epstein-Barr virus nuclear antigen-1 (EBNA-1) and oriP differentially contribute to the efficiency of transfection/expression of exogenous gene in mammalian cells [J]. *Journal of biotechnology*, 2008, 133(2): 201-207
- [7] Silla T, Hääl I, Geimanen J, et al. Episomal maintenance of plasmids with hybrid origins in mouse cells [J]. *Journal of virology*, 2005, 79(24): 15277-15288
- [8] Backliwal G, Hildinger M, Chenuet S, et al. Rational vector design and multi-pathway modulation of HEK 293E cells yield recombinant antibody titers exceeding 1 g/l by transient transfection under serum-free conditions[J]. *Nucleic acids research*, 2008, 36(15): 96-96
- [9] Ye J, Kober V, Tellers M, et al. High level protein expression in scalable CHO transient transfection [J]. *Biotechnology and bioengineering*, 2009, 103(3): 542-551
- [10] Codamo J, Munro T P, Hughes B S, et al. Enhanced CHO cell-based transient gene expression with the Epi-CHO expression system [J]. *Molecular biotechnology*, 2011, 48(2): 109-115
- [11] Xia W, Bringmann P, McClary J, et al. High levels of protein expression using different mammalian CMV promoters in several cell lines[J]. *Protein expression and purification*, 2006, 45(1): 115-124
- [12] Ho S C L, Yap M G S, Yang Y. Evaluating post-transcriptional regulatory elements for enhancing transient gene expression levels in CHO K1 and HEK293 cells [J]. *Protein expression and purification*, 2010, 69(1): 9-15
- [13] Kim K S, Kim M S, Moon J H, et al. Enhancement of recombinant antibody production in HEK 293E cells by WPRE [J]. *Biotechnology and Bioprocess Engineering*, 2009, 14(5): 633-638
- [14] Huh S H, Do H J, Lim H Y, et al. Optimization of 25 kDa linear polyethylenimine for efficient gene delivery[J]. *Biologicals*, 2007, 35(3): 165-171
- [15] Rajendra Y, Kiseljak D, Manoli S, et al. Role of non specific DNA in reducing coding DNA requirement for transient gene expression with CHO and HEK 293E cells [J]. *Biotechnology and bioengineering*, 2012, 109(9): 2271-2278
- [16] Sun X, Hia H C, Goh P E, et al. High density transient gene expression in suspension adapted 293 EBNA1 cells[J]. *Biotechnology and bioengineering*, 2008, 99(1): 108-116
- [17] Raymond C, Tom R, Perret S, et al. A simplified polyethylenimine-mediated transfection process for large-scale and high-throughput applications[J]. *Methods*, 2011, 55(1): 44-51
- [18] Eberhardy S R, Radzinski L, Liu Z. Iron (III) citrate inhibits polyethylenimine-mediated transient transfection of Chinese hamster ovary cells in serum-free medium[J]. *Cytotechnology*, 2009, 60(1-3): 1-9
- [19] Geisse S, Voedisch B. Transient Expression Technologies: Past, Present, and Future [M]. *Therapeutic Proteins*. Humana Press, 2012: 203-219
- [20] Rajendra Y, Kiseljak D, Baldi L, et al. A simple high-yielding process for transient gene expression in CHO cells [J]. *Journal of biotechnology*, 2011, 153(1): 22-26
- [21] Backliwal G, Hildinger M, Chenuet S, et al. Coexpression of acidic fibroblast growth factor enhances specific productivity and antibody titers in transiently transfected HEK293 cells [J]. *New biotechnology*, 2008, 25(2): 162-166
- [22] Hwang S O, Lee G M. Effect of Akt overexpression on programmed cell death in antibody-producing Chinese hamster ovary cells [J]. *Journal of Biotechnology*, 2009, 139(1): 89-94
- [23] Wulhfard S, Baldi L, Hacker D L, et al. Valproic acid enhances recombinant mRNA and protein levels in transiently transfected Chinese hamster ovary cells [J]. *Journal of biotechnology*, 2010, 148(2): 128-132
- [24] Robert F, Bierau H, Rossi M, et al. Degradation of an Fc fusion recombinant protein by host cell proteases: Identification of a CHO cathepsin D protease [J]. *Biotechnology and bioengineering*, 2009, 104(6): 1132-1141
- [25] Zhao Y, Gutshall L, Jiang H, et al. Two routes for production and purification of Fab fragments in biopharmaceutical discovery research: papain digestion of mAb and transient expression in mammalian cells[J]. *Protein expression and purification*, 2009, 67(2): 182-189

(上接第 566 页)

- [15] Oude Griep LM, Verschuren WM, Kromhout D, et al. Variety in fruit and vegetable consumption and 10-year incidence of CHD and stroke [J]. *Public Health Nutr*, 2012, 15(12): 2280-2286
- [16] 姚艳冬. PCI 术后患者宣教依从性现状分析 [J]. *中国疗养医学*, 2011, 20(4): 341-342
- Yao Yan-dong. Analysis of education on patients of undergoing percutaneous coronary intervention [J]. *Chinese Journal of Convalescent Medicine*, 2011, 20(4): 341-342
- [17] 张淑峰. 冠心病患者饮食的临床观察与对策 [J]. *中医临床研究*, 2011, 3(1): 111
- Zhang Shu-feng. Clinical observation and measures of coronary heart disease patient diet [J]. *Clinical Journal of Chinese Medicine*, 2011, 3(1): 111
- [18] 许红, 叶向红, 郑新玲, 等. 冠心病患者经皮冠状动脉介入治疗后的遵医行为及对策[J]. *护理与康复*, 2010, 9(10): 838-839
- Xu Hong, Ye Xiang-hong, Zheng Xin-ling, et al. Compliance behavior of patients with coronary heart disease after percutaneous coronary intervention and countermeasures [J]. *Nursing and Rehabilitation Journal*, 2010, 9(10): 838-839
- [19] 冯曲丽, 刘莉, 李金波. 饮食提示卡在食管癌患者围手术期健康教育中的应用[J]. *护理管理杂志*, 2012, 12(2): 139-140
- Feng Qu-li, Liu Li, Li Jin-bo. Application of diet suggesting cards in perioperative health education for patients with esophageal cancer[J]. *Journal of Nursing Administration*, 2012, 12(2): 139-140