

# 还原型谷胱甘肽对糖尿病肾病 MCP-1、TGF-β 1 影响研究

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**【摘要】**目的: 针对糖尿病肾病患者采用还原型谷胱甘肽治疗临床效果进行分析。方法: 在 2020 年 2 月到 2022 年 2 月期间, 采用计算机随机选号的方式对 58 例到本院接受糖尿病肾病治疗的患者进行对比研究, 采用随机配号的方式将其平均分为对照组和观察组, 每组各 29 例, 分别对其进行常规药物治疗和还原型谷胱甘肽治疗, 对比两组患者治疗前后 24h 尿总蛋白水平、尿血氮水平、胰岛功能改善情况、生化指标以及 MCP-1、TGF-β 1 指标变化情况。结果: 观察组患者治疗后 24h 尿总蛋白水平、尿血氮水平、胰岛功能改善情况、生化指标以及 MCP-1、TGF-β 1 指标变化情况均要优于对照组 ( $p < 0.05$ )。结论: 针对糖尿病肾病患者采用还原型谷胱甘肽治疗效果较为明显, 能够有效控制患者 24h 尿总蛋白水平、尿血氮水平以及 MCP-1、TGF-β 1 指标, 改善患者生化指标以及 MCP-1、TGF-β 1 指标, 稳定患者血糖变化情况, 使患者病情得到有效控制。

**【关键词】**: 糖尿病肾病; 还原型谷胱甘肽; 生化指标

## Effects of Reduced Glutathione on MCP-1 and TGF-β1 in Diabetic Nephropathy

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**Abstract:** Objective: to analyze the clinical effect of reduced glutathione in patients with diabetes nephropathy. Methods: from February 2020 to February 2022, 58 patients with diabetes nephropathy who came to our hospital for treatment were compared by computer random number selection. They were divided into control group and observation group by random number, with 29 patients in each group. They were treated with conventional drugs and reduced glutathione respectively. The total protein level of urine, the blood nitrogen level of urine Improvement of islet function, biochemical indexes, MCP-1 and TGF-β 1 Index changes. Results: 24 hours after treatment, the total urine protein level, the urine nitrogen level, the improvement of islet function, biochemical indicators, MCP-1, TGF in the observation group-β 1. The changes of indexes in the control group were better than those in the control group ( $p < 0.05$ ). Conclusion: reduced glutathione is effective in the treatment of diabetes nephropathy, which can effectively control the 24-hour urine total protein level, urine hemoglobin nitrogen level, MCP-1, TGF-β 1 index to improve patients' biochemical indexes, MCP-1 and TGF-β 1 Index, stabilize the blood sugar change of patients, and effectively control the patient's condition.

**Keywords:** Diabetic nephropathy; Reduced glutathione; Biochemical indicators

[3]

### 1 资料与方法

[1]

1.1

2020 2 2022 2

58

58 1 58

29

18 11 62.34± 2.54

4.47± 2.67

[2]

29 19 10 24h  
62.77± 2.39 4.49± 2.41 P<0.05  
P>0.05 1 1  
1 2 60 3  
4 4  
1 1  
2 3  
4 3  
5 4  
1.2 5  
J2017107687  
3ml 300  
H20063562  
30mg\*14s  
H35000084  
)  
1800mg/d 14 2  
1.3 24h  
MCP-1 TGF- 1  
1 24h  
24h 150mg/24h  
1.7- 8.4mmol/L 2  
HOMA-IR  
HOMA- FBC 2hBG( 2 3  
) HbA1C( )  
3.9-6.1mmol/L  
7.8mmol 4 MCP-1 TGF- 1  
-1 [4]  
1.4  
SPSS19.0  
t x± s P 0.05  
2 结果  
21 24h  
P<0.05  
3

		24h		24h	
		mg/24h	mmol/L	mg/24h	mmol/L
t p	29	178.56±		137.78±	
	29	11.56	9.67± 1.12	5.23	6.34± 1.89
	-	179.76±	9.74± 1.08	151.67±	8.11± 1.89
	-	10.56	2.498	3.56	10.541
	-	2.674	0.849	10.658	0.001
		0.865		0.001	

		HOMA-IR		HOMA-	
		HOMA-IR	HOMA-	HOMA-IR	HOMA-
t p	29	2.53± 0.87	11.12± 2.36	2.01± 0.15	18.45± 2.54
	29	2.57± 0.75	11.38± 2.31	2.31± 0.23	14.34± 2.14
	-	2.423	2.521	10.253	10.542
	-	0.847	0.844	0.001	0.001

3

n=29						
	FBC nmmd/l	2hBG nmmd/l	HbA1C %	FBC nmmd/l	2hBG nmmd/l	HbA1C %
t p	7.45± 1.45	18.45± 3.78	8.45± 3.55	6.18± 0.87	14.24± 2.18	7.33± 0.95
	7.54± 1.42	18.97± 3.73	8.42± 2.90	7.34± 0.32	15.67± 1.11	8.22± 0.56
	2.453	2.436	2.447	10.265	10.226	10.219
	0.824	0.858	0.828	0.001	0.001	0.001

24

MCP-1 TGF- 1

MCP-1 TGF- 1

P<0.05

4

4

MCP-1 TGF- 1

		MCP-1 pg/ml	TGF- 1 ng/ml	MCP-1 pg/ml	TGF- 1 ng/ml
t p	2	18.45±	18.45±	18.45±	18.45±
	9	3.78	3.78	3.78	3.78
	2	18.97±	18.97±	18.97±	18.97±
	9	3.73	3.73	3.73	3.73
	-	2.276	2.417	10.342	10.287
	-	0.849	0.876	0.001	0.001

3 讨论

DPP- 4

- 1

GLP-1

[7]

TGF- 1  
TGF- 1

TGF- 1

MCP-1 [3] Rg1 TGF- 1

MCP-1 MCP- 1mRNA [J]. ,2020,20(05):  
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MCP- 1 [4] 2 [J]. ,2020,  
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VEGF IGF- 1 MCP- 1 TGF1 "

TGF- 1 [J]. ,2021,16(06): 21JR1RG304  
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