

# 早期使用替罗非班联合不同调脂药对老年冠心病患者经冠状动脉介入治疗的临床观察

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**摘要** 目的:观察早期使用替罗非班联合不同调脂药对老年冠心病患者经冠状动脉介入治疗(PCI)的短期疗效及安全性。方法:选取择期行PCI的老年冠心病患者562例,按照随机数字表法分为阿托伐他汀组和普罗布考组,各281例。两组患者均行常规治疗,阿托伐他汀组患者在常规治疗基础上给予替罗非班联合阿托伐他汀钙片治疗;普罗布考组患者在常规治疗基础上给予替罗非班联合普罗布考片治疗,比较两组患者治疗前后各项临床指标及不良心脏事件(MACE)。结果:治疗后阿托伐他汀组心肌梗死溶栓(TIMI)3级患者比例为69.4%,低于普罗布考组的95.7%,差异有统计学意义( $P<0.05$ );两组患者治疗12h后肌酸激酶(CK)、肌酸激酶同工酶(CK-MB)、左室射血分数(LVEF)均降低,肌钙蛋白I(cTnI)升高,阿托伐他汀组患者LVEF下降更显著,差异均有统计学意义( $P<0.05$ );普罗布考组患者治疗8周后一氧化氮(NO)、NO/内皮素(ET)-1、还原性谷胱甘肽(GSH)、GSH/氧化性谷胱甘肽(GSSG)较治疗前显著升高,ET-1、GSSG、氧化还原电位(Eh)较治疗前显著降低,阿托伐他汀组患者上述指标均未见明显变化,组间比较差异均有统计学意义( $P<0.05$ );阿托伐他汀组和普罗布考组患者治疗期间主要MACE发生率分别为21.7%、21.4%,差异无统计学意义( $P>0.05$ )。结论:替罗非班联合不同调脂药均可有效改善老年冠心病患者PCI预后且安全性较好,但替罗非班联合普罗布考片具有更为明显的治疗效果。

**关键词** 替罗非班;阿托伐他汀;普罗布考;老年;冠心病;经冠状动脉介入治疗

## Clinical Observation of Early Application of Tirofiban Combined with Different Lipid-regulating Drugs Intervention in Elderly Patients with Coronary Heart Disease

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**ABSTRACT** OBJECTIVE: To observe short-term efficacy and safety of early use of tirofiban combined with different lipid-regulating drugs percutaneous coronary intervention (PCI) in elderly patients with coronary heart disease. METHODS: 562 elderly patients with coronary heart disease underwent selective PCI were selected and randomly divided into atorvastatin group and probucol group, with 281 cases in each group. Both group received routine treatment; atorvastatin group was additionally given tirofiban combined with Atorvastatin tablet, and probucol group was additionally given irofiban combined with ProbucoL tablet. Clinical indicators and main adverse cardiac event (MACE) were compared between 2 groups before and after treatment. RESULTS: After treatment, 3 level of thrombolysis in myocardial infarction (TIMI) in atorvastatin group accounted for 69.4%, which was significantly lower than 95.7% of probucol group, with statistical significance ( $P<0.05$ ). After 12h treatment, CK, 2 groups had lower CK-MB and LVEF and higher cTnI; LVEF decrease of atorvastatin group was more significant, with statistical significance ( $P<0.05$ ); after 8 weeks of treatment, NO, NO/ET-1, GSH, GSH/GSSG of probucol group were increased significantly, and ET-1, GSSG and Eh decreased significantly; above indexes of atorvastatin group had no significant change, there was statistical significance between 2 groups ( $P<0.05$ ). The incidence of MACE in atorvastatin group and probucol group were 21.7% and 21.4%, there was no significant difference ( $P>0.05$ ). CONCLUSIONS: Tirofiban combined with different lipid-regulating drugs can effectively improve the prognosis of elderly patients with coronary heart disease after PCI operation with good safety, but tirofiban combined with probucol has more obvious therapeutic effect.

**KEYWORDS** Tirofiban; Atorvastatin; ProbucoL; Elderly; Coronary heart disease; Percutaneous coronary intervention

经皮冠状动脉介入治疗(PCI)具有减少动脉血栓、解除动脉缺血、防止支架再狭窄等效果,是近年来冠心病的首选治疗方案之一,在改善患者心功能状态、保证其远期预后方面发挥了良好的作用<sup>[1]</sup>。然而,目前PCI术后心血管事件的发生率仍

较高,这与局部炎性反应、黏附反应及血小板聚集等因素均具有密切关联<sup>[2]</sup>。替罗非班是一种高特异性血小板糖蛋白Ⅱb/Ⅲa受体拮抗药,具有高效抗血小板聚集作用。为探讨其与不同调脂药联用的疗效,笔者进行了如下临床研究。

### 1 资料与方法

#### 1.1 病例选择

选取2011年5月—2013年5月我院收治的择期行PCI治疗的老年冠心病患者562例,按随机数字表法分为阿托伐他汀

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组和普罗布考组,各281例。其中,阿托伐他汀组患者男性153例,女性128例;年龄65~79岁,平均年龄(68.2±9.6)岁;疾病类型:心肌梗死95例,心绞痛186例。普罗布考组患者男性155例,女性126例;年龄65~77岁,平均年龄(69.0±8.2)岁;疾病类型:心肌梗死99例,心绞痛182例。两组患者性别、年龄、疾病类型等一般资料比较,差异无统计学意义( $P>0.05$ ),具有可比性。本研究方案经医院伦理委员会审核通过,患者均知情同意并签署知情同意书。

## 1.2 入选与排除标准

入选标准:(1)参照文献关于冠状动脉粥样硬化性心脏病诊断标准确诊<sup>[3]</sup>;(2)年龄≥65岁者。排除标准:(1)入组前24 h内接受溶栓治疗者;(2)凝血功能障碍者;(3)合并肝、肾、脑等重要脏器官病者;(4)合并恶性肿瘤或急性感染者。

## 1.3 治疗方法

两组患者均接受择期PCI围术期常规治疗方案,包括β受体阻滞药、钙通道阻滞药、阿司匹林、血管紧张素转化酶抑制剂、血管紧张素Ⅱ受体拮抗药等药物,按照患者实际情况制定用药方案,同时术前给予盐酸替罗非班氯化钠注射液(远大制药有限公司,国药准字H20041165,规格:100 ml,合盐酸替罗非班5 mg与氯化钠0.9 g)治疗,以10 μg/kg静脉推注,3 min内推注完毕,此后以0.15 μg/(kg·min)微量泵入,持续24~48 h。阿托伐他汀组患者在常规治疗基础上给予阿托伐他汀钙片(辉瑞制药有限公司,国药准字H20051409,规格:40 mg)口服,80 mg/次,1次/d。

普罗布考组患者在常规治疗基础上给予普罗布考片(齐鲁制药有限公司,国药准字H10980054,0.125 g)口服,0.5 g/次,2次/d,分别于早餐、晚餐时服用。

## 1.4 观察指标

1.4.1 血流情况 参照心肌梗死溶栓治疗(TIMI)血流分级标准<sup>[4]</sup>,对两组患者PCI术后血流分级进行评定:TIMI 0级为闭塞处无法通过造影剂,TIMI 1级为可见少量造影剂通过,TIMI 2级为造影剂可通过但流速偏慢,TIMI 3级为造影剂流速及排空均正常。

表2 两组患者治疗前后心肌功能比较( $\bar{x}\pm s$ )

Tab 2 Comparison of cardiac function between two groups before and after treatment( $\bar{x}\pm s$ )

指标	阿托伐他汀组( $n=281$ )				普罗布考组( $n=281$ )			
	术后4 h	术后12 h	$t$	$P$	术后4 h	术后12 h	$t$	$P$
CK, IU/L	682.91±195.21	96.37±24.60	19.208	<0.05	674.90±184.26	95.92±23.50	24.336	<0.05
CK-MB, U/L	75.33±24.91	21.39±6.82	10.525	<0.05	76.09±23.85	20.48±5.97	11.507	<0.05
cTnI, ng/ml	1.25±0.49	3.71±0.96	6.384	<0.05	1.27±0.48	3.68±0.79	8.252	<0.05
LVEF, %	59.43±1.72	52.24±2.08	8.279	<0.05	59.92±1.86	55.35±2.47*	10.914	<0.05

注:与阿托伐他汀组比较,\* $P<0.05$

Note: vs. atorvastatin group, \* $P<0.05$

## 2.3 两组患者治疗前后氧化还原态比较

普罗布考组患者用药8周后NO、NO/ET-1、GSH、GSH/GSSG显著升高,ET-1、GSSG、Eh显著降低,差异均有统计学意义( $P<0.05$ );阿托伐他汀组患者用药前后未见明显变化,差异无统计学意义( $P>0.05$ )。两组患者治疗前后氧化还原态比较见表3。

## 2.4 两组患者治疗期间MACE发生情况

阿托伐他汀组、普罗布考组患者治疗期间MACE发生率分别为21.7%、21.4%,差异无统计学意义( $P>0.05$ )。两组患者治疗期间MACE发生情况见表4。

## 3 讨论

1.4.2 心肌功能 对两组患者术后4、12 h肌酸激酶(CK)、肌酸激酶同工酶(CK-MB)、肌钙蛋白I(cTnI)、左室射血分数(LVEF)进行检测。

1.4.3 氧化还原态 抽取两组患者用药前,8周后清晨空腹静脉血,使用特异性放射免疫均相竞争法对内皮素(ET)-1进行检测,用硝酸还原酶法对一氧化氮(NO)进行检测,用荧光光度法对还原性谷胱甘肽(GSH)、氧化性谷胱甘肽(GSSG)进行检测,参照文献方法计算GSH/GSSG氧化还原电位(Eh)<sup>[5]</sup>。

1.4.4 心脏事件 对两组患者用药8周内主要不良心脏事件(MACE)进行统计,包括心源性死亡、严重心力衰竭、心肌梗死、恶性心律失常及靶病变血管重建等。

## 1.5 统计学方法

采用SPSS 18.0软件进行统计学分析。计数资料以率表示,采用 $\chi^2$ 检验;计量资料以 $\bar{x}\pm s$ 表示,采用 $t$ 检验。 $P<0.05$ 为差异有统计学意义。

## 2 结果

### 2.1 两组患者治疗后TIMI血流分级比较

阿托伐他汀组TIMI 3级患者占69.4%,显著低于普罗布考组的95.7%,差异有统计学意义( $P<0.05$ )。两组患者治疗后TIMI血流分级比较见表1。

表1 两组患者治疗后TIMI血流分级比较[例(%)]

Tab 1 Changes of TIMI flow grade in two groups before and after treatment[case(%)]

组别	$n$	TIMI 2级	TIMI 3级
阿托伐他汀组	281	86(30.6)	195(69.4)
普罗布考组	281	12(4.3)	269(95.7)
$\chi^2$		19.218	
$P$		<0.05	

### 2.2 两组患者治疗前后心肌功能比较

两组患者术后12 h CK、CK-MB、LVEF均显著降低,cTnI显著升高,阿托伐他汀组患者LVEF下降较普罗布考组更为显著,差异有统计学意义( $P<0.05$ )。两组患者治疗前后心肌功能比较见表2。

表2 两组患者治疗前后心肌功能比较( $\bar{x}\pm s$ )

Tab 2 Comparison of cardiac function between two groups before and after treatment( $\bar{x}\pm s$ )

指标	阿托伐他汀组( $n=281$ )				普罗布考组( $n=281$ )			
	术后4 h	术后12 h	$t$	$P$	术后4 h	术后12 h	$t$	$P$
CK, IU/L	682.91±195.21	96.37±24.60	19.208	<0.05	674.90±184.26	95.92±23.50	24.336	<0.05
CK-MB, U/L	75.33±24.91	21.39±6.82	10.525	<0.05	76.09±23.85	20.48±5.97	11.507	<0.05
cTnI, ng/ml	1.25±0.49	3.71±0.96	6.384	<0.05	1.27±0.48	3.68±0.79	8.252	<0.05
LVEF, %	59.43±1.72	52.24±2.08	8.279	<0.05	59.92±1.86	55.35±2.47*	10.914	<0.05

注:与阿托伐他汀组比较,\* $P<0.05$

Note: vs. atorvastatin group, \* $P<0.05$

PCI是老年冠心病患者的首选治疗方案,其可通过早期贯通冠脉闭塞血管达到恢复心肌供血的效果。然而,老年冠心病患者动脉粥样硬化斑块稳定性较低,在PCI术中易发生血栓碎裂、脱落,进而引发血小板激活、黏附,易引发二次血栓形成<sup>[6]</sup>。此外,术中斑块的损伤亦会导致基质成分、炎性因子积聚,对心脏微血管造成损伤,使得术后MACE发生率较高,影响患者预后<sup>[7]</sup>。

替罗非班是我国广泛应用的高选择性非肽类血小板糖蛋白Ⅱb/Ⅲa受体拮抗药,是目前拮抗血小板聚集作用最强的药物之一。血小板糖蛋白Ⅱb/Ⅲa受体主要黏附于血小板、巨噬细胞表面,是一类整合素家族糖蛋白,占血小板总蛋白量的

表3 两组患者治疗前后氧化还原态比较( $\bar{x} \pm s$ )Tab 3 Comparison of redox state between two groups before and after treatment( $\bar{x} \pm s$ )

指标	阿托伐他汀组(n=281)				普罗布考组(n=281)			
	用药前	用药8周后	t	P	用药前	用药8周后	t	P
NO, $\mu\text{mol/L}$	48.32 ± 15.07	49.07 ± 16.33	1.094	>0.05	48.48 ± 14.97	66.52 ± 17.60*	19.204	<0.05
ET-1, ng/L	150.39 ± 62.58	150.28 ± 57.41	0.285	>0.05	151.26 ± 63.79	120.39 ± 58.25*	11.582	<0.05
NO/ET-1	0.32 ± 0.18	0.33 ± 0.17	0.073	>0.05	0.33 ± 0.16	0.55 ± 0.17*	10.740	<0.05
GSH, $\mu\text{mol/L}$	282.91 ± 37.60	288.25 ± 39.27	0.572	>0.05	274.62 ± 38.50	320.58 ± 55.40*	16.280	<0.05
GSSG, $\mu\text{mol/L}$	33.95 ± 1.83	33.39 ± 1.57	0.660	>0.05	34.04 ± 1.72	31.39 ± 1.68*	9.225	<0.05
GSH/GSSG	8.25 ± 1.17	8.29 ± 1.36	0.391	>0.05	8.30 ± 1.08	10.12 ± 1.73*	6.374	<0.05
Eh, mV	-132.91 ± 1.47	-135.20 ± 1.70	1.135	>0.05	-130.74 ± 1.55	-144.96 ± 1.50*	12.925	<0.05

注:与阿托伐他汀组比较,\*P&lt;0.05

Note:vs. atorvastatin group,\*P&lt;0.05

表4 两组患者治疗期间MACE发生情况[例(%)]

Tab 4 Comparison of MACE between two groups during treatment[case(%)]

组别	n	死亡	心律失常	新发心梗	再发心绞痛	MACE发生
阿托伐他汀组	281	8(2.8)	19(6.8)	3(1.1)	31(11.0)	61(21.7)
普罗布考组	281	7(2.5)	23(8.2)	2(0.7)	28(10.0)	60(21.4)
$\chi^2$		0.172	0.903	0.085	0.726	0.835
P		>0.05	>0.05	>0.05	>0.05	>0.05

1.5%~2.0%。血管内皮发生损伤后会激活血小板,引发血小板糖蛋白 II b/III a 受体构象改变,导致血小板桥联出现,进而引发血小板聚集、血栓形成<sup>[8]</sup>。而替罗非班可占据血小板糖蛋白 II b/III a 受体交联位点,拮抗纤维蛋白原和血管性假血友病因子介导的血小板激活,在抑制血栓形成方面发挥了重要作用。其半衰期为 2 h,给药 5 min 对血小板的抑制率即可达到 95% 以上,且可经尿液、胆汁排泄,停药 4 h 后即可恢复用药前血小板聚集水平,具有起效快、安全性高的优势。

阿托伐他汀属他汀类调脂药,在发挥调节血脂功能的同时,亦能起到抗炎、保护血管内皮的作用,在老年冠心病患者血流状况的改善过程中有着一定作用。普罗布考是一种抗氧化调脂药物,在降低胆固醇的同时,亦具有抑制泡沫细胞形成作用,从而有助于降低动脉粥样硬化斑块形成速度及消退<sup>[9]</sup>。周浩等<sup>[10]</sup>研究发现,老年冠心病患者存在明显谷胱甘肽向氧化态偏移现象,这是导致其粥样硬化斑块形成与发展、影响心肌功能的重要原因。普罗布考通过促进 NO 释放、抑制 ET-1 水平,起到避免血管内皮因氧化反应造成损伤的作用,同时可通过改变 GSH、GSSG 氧化还原电位,最终达到平衡患者机体氧化还原态的目的,保证了治疗效果。

一般而言,早期单用替罗非班即可取得明显降低老年冠心病患者缺血时间发生率的作用。但多数研究均指出,替罗非班单用时往往需选择较大剂量,而较大剂量药物应用在迅速改善患者症状的同时,也极大地减少血小板甚至出血风险<sup>[11-12]</sup>。相比较阿托伐他汀而言,普罗布考具有更低的肾毒性,能够有效避免因药物肾毒性导致的肾功能不全等并发症发生,有助于进一步降低因肾功能不全导致的冠脉粥样硬化反应,具有更佳的疗效及安全性。

综上所述,早期应用替罗非班联合阿托伐他汀或普罗布考等调脂药物均可有效改善患者血流状态、心功能,降低 MACE 发生率,且能够降低应用肝素、氯吡格雷等药物引发的出血风险,但联用普罗布考可进一步纠正患者氧化还原态偏移,对于患者预后质量的改善有着更为积极的意义。但本研究观察时间短,样本量较小,需要大样本、多中心、临床观察进一步证实,使结果更加准确。

## 参考文献

- [1] Valgimigli M, Tebaldi M, Campo G, et al. Prasugrel versus tirofiban bolus with or without short post-bolus infusion with or without concomitant prasugrel administration in patients with myocardial infarction undergoing coronary stenting: the FABOLUS PRO (Facilitation through aggrastat by dropping or shortening infusion line in patients with ST-segment elevation myocardial infarction compared to or on top of prasugrel given at loading dose) trial[J]. *JACC: Cardiovascular Interventions*, 2012, 5(3):268.
- [2] 李文,张鸿举,王相智,等.急性心肌梗死急诊介入术中冠脉内应用替罗非班的近期疗效评价[J].中国循证心血管医学杂志,2011,3(3):189.
- [3] Li AYW, Ng FH, Chan FKL, et al. Effect of amlodipine on platelet inhibition by clopidogrel in patients with ischaemic heart disease: a randomised, controlled trial[J]. *Heart*, 2013, 99(7):468.
- [4] 王新宙,贾永平.急性冠脉综合征患者经皮冠脉介入应用盐酸替罗非班的疗效观察[J].中西医结合心脑血管病杂志,2011,9(1):17.
- [5] 周恒,毛晓波,周心涛,等.早期使用替罗非班对非 ST 段抬高急性冠脉综合征患者冠脉介入术后 C 反应蛋白及心肌标志物的影响[J].华中科技大学学报:医学版,2012,41(2):202.
- [6] Price M J, Angiolillo DJ, Teirstein PS, et al. Platelet reactivity and cardiovascular outcomes after percutaneous coronary intervention a time-dependent analysis of the gauging responsiveness with a verifynow P12Y2 assay: impact on thrombosis and safety (GRAVITAS) trial[J]. *Circulation*, 2011, 124(10):1132.
- [7] Shaw LJ, Weintraub WS, Maron DJ, et al. Baseline stress myocardial perfusion imaging results and outcomes in patients with stable ischemic heart disease randomized to optimal medical therapy with or without percutaneous coronary intervention[J]. *American Heart Journal*, 2012, 164(2):243.
- [8] 罗亚玮,陈方,潘昱,等.血小板糖蛋白 II b/III a 受体拮抗药替罗非班的抗血小板以外作用[J].中国药房,2015,26(2):278.
- [9] Hamm CW, Bassand JP, Agewall S, et al. ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation

# 自体血清滴眼液治疗准分子激光角膜屈光手术后丝状角膜炎的临床观察

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**摘 要** 目的:观察自体血清滴眼液治疗准分子激光角膜屈光手术后丝状角膜炎的临床疗效及安全性。方法:选取准分子激光角膜屈光手术后丝状角膜炎患者46例(90眼),按随机数字表法分为对照组和观察组,各23例(45眼)。对照组患者给予清除丝状物+佩戴软性接触镜+重组牛碱性成纤维细胞生长因子滴眼液治疗,观察组患者给予清除丝状物+佩戴软性接触镜+自体血清滴眼液治疗,比较两组患者临床疗效、治愈时间、复发率及不良反应。结果:观察组患者治疗总有效率为93.3%,高于对照组的82.2%,差异有统计学意义( $P<0.05$ );观察组治愈时间为 $(2.7\pm 1.1)$ d,较对照组患者治愈时间 $(3.5\pm 1.2)$ d有明显缩短,差异有统计学意义( $P<0.05$ );观察组患者丝状角膜炎复发率为4.4%,对照组为15.6%,观察组显著低于对照组,差异有统计学意义( $P<0.05$ );治疗期间观察组和对照组患者分别发生角膜上皮水肿1例(1眼)和2例(2眼),差异无统计学意义( $P>0.05$ )。结论:清除丝状物+佩戴软性接触镜+自体血清滴眼液治疗准分子激光角膜屈光手术后丝状角膜炎总有效率高、治愈时间快、复发率低,且不良反应少。

**关键词** 准分子激光角膜屈光手术;丝状角膜炎;自体血清滴眼液;疗效

## Clinical Observation of Autoserum Eye Drops in the Treatment of Filamentosa Keratitis after Excimer Laser Corneal Refractive Surgery

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**ABSTRACT** OBJECTIVE: To observe clinical efficacy and safety of Autoserum eye drops in the treatment of filamentary keratitis after excimer laser corneal refractive surgery. METHODS: 46 patients (90 eyes) with filamentary keratitis after excimer laser corneal refractive surgery were selected and randomly divided into control group and observation group with 23 cases (45 eyes) in each group. The control group was given clearing mesh+wearing soft contact lens+bFGF eye drops; the observation group was given clearing mesh+ wearing soft contact lens + Autoserum eye drops. The clinical efficacy, cure time, recurrence rate and ADR were compared between 2 groups. RESULTS: The total effective rate of observation group was 93.3%, which was higher than that (82.2%) of the control group, with statistical significance ( $P<0.05$ ); the cure time of observation group was  $(2.7\pm 1.1)$  d, which was shortened significantly compared with control group [ $(3.5\pm 1.2)$ d], with statistical significance ( $P<0.05$ ). The recurrence rate of filamentous keratitis was 4.4% in observation group and 15.6% in control group; the observation group was significantly lower than the control group, with statistical significance ( $P<0.05$ ). During the treatment, there were 1 case (1 eyes) of corneal epithelial edema in observation group and 2 cases (2 eyes) of corneal epithelial edema in control group, there was no statistical significance ( $P>0.05$ ). CONCLUSIONS: In the treatment of filamentous keratitis after excimer laser corneal refractive surgery, therapy of clearing mesh+wearing soft contact lens+Autoserum eye drops have high total effective rate, low recurrence rate and short cure period with less ADR.

**KEYWORDS** Excimer laser corneal refractive surgery; Filamentous keratitis; Autoserum eye drops; Therapeutic efficacy

The Task Force for the management of acute coronary syndromes (ACS) in patients presenting without persistent ST-segment elevation of the European Society of Cardiology (ESC) [J]. *European Heart Journal*, 2011, 32 (23):2 999.

[10] 周浩,黄伟剑,吴高俊,等.冠脉内注射替罗非班对急性心肌梗死急诊介入治疗 ST 段回落的影响[J]. *心脑血管*

病防治,2011,11(1):4.

[11] Korte W, Cattaneo M, Chassot PG, et al. Peri-operative management of antiplatelet therapy in patients with coronary artery disease[J]. *Thromb Haemost*, 2011, 105 (5) : 743.

[12] 黄红梅,李俐.替罗非班治疗老年非 ST 段抬高急性冠脉综合症的临床研究[J]. *中国循证心血管医学杂志*, 2011, 3(1):41.

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