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## 支架置入技术治疗食道癌的临床疗效及预后 \*

洪慧玲 王 煜 郑亦农 郑可造 陈 雍

(皖南医学院附属黄山市人民医院 安徽 黄山 245000)

**摘要 目的:**观察支架置入法对食道癌患者的治疗效果及预后情况。**方法:**选取我院收治的食道癌患者共 104 例,根据治疗手段分为两组,其中对照组 52 例采用 70 Gy 7 / 周治疗方案;实验组 52 例给予支架置入法治疗。对两组患者的梗阻改善情况、生存质量评分、并发症及生存情况进行统计分析。**结果:**①治疗后,两组患者的梗阻情况以及生存质量均得到有效改善,实验组患者的梗阻总缓解率为 92.31%,生存质量评分为  $42.61 \pm 5.23$  分,均显著高于对照组,差异具有显著性( $P < 0.05$ );②实验组患者的不良反应发生率(36.54%)与对照组(38.48%)比较无统计学差异( $P > 0.05$ );③两组患者的 3 个月及 6 个月时的生存率相接近,但是实验组患者 12 个月生存率(71.7%)显著低于对照组(82.7%),差异具有统计学意义( $P < 0.05$ )。**结论:**支架置入法能够显著改善食道癌患者的梗阻症状,提高患者生存质量,是较为安全可靠的缓解食道狭窄方法。

**关键词:**支架置入;食道癌;放疗

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## Curative Effect and Prognosis of Esophageal Stent Implantation in Esophageal Cancer\*

HONG Hui-ling, WANG Yu, ZHENG Yi-nong, ZHENG Ke-zao, CHEN Yong

(Huangshan People's Hospital, Affiliated Hospital of Wangnan Medical College, Huangshan, Anhui, 245000, China)

**ABSTRACT Objective:** To investigate the curative effects and prognosis of the esophageal stent implantation in the treatment of esophageal cancer. **Methods:** 104 cases of esophageal cancer from our hospital were selected, and according to treatment methods they were divided into two groups, 52 cases each group. The patients in control group were used 70 G gamma 7/ week treatment scheme; and the patients in the experimental group were given the implantation of stent, namely the placement of Ni Ti shape memory alloy coated stent. The improvement of obstruction, the score of quality of life, the complications and survival of all the patients were recorded and statistically analyzed. **Results:** ① After treatment, the esophageal obstruction and life quality was effectively improved in these two groups. The total efficient rate of improvement of obstruction in the experimental group was 92.31%, and the quality of life score was  $42.61 \pm 5.23$  points, which were significantly higher than that of control group, with significant difference ( $P < 0.05$ ); ② The incidence of adverse reaction in experimental group (36.54% patients) and control group (38.48%) had no statistical difference ( $P > 0.05$ ); ③ Survival in 3 months and 6 months of two groups of patients were similar, but the patients in the experimental group and 12 months survival rate (71.7%) was significantly lower than the control group (82.7%), with significant difference ( $P < 0.05$ ). **Conclusions:** The esophageal stent implantation can significantly improve the obstruction symptoms of patients with esophageal cancer, improve the survival quality, with more safety and higher efficiency to reduce esophageal stricture.

**Key words:** Esophageal stent; Esophageal cancer; Radiotherapy**Chinese Library Classification(CLC): R735.1 Document code: A****Article ID:** 1673-6273(2015)19-3674-04

### 前言

食道癌作为临床较为常见的恶性肿瘤之一,大多数患者确诊时已到中晚期,无法采取手术治疗<sup>[1]</sup>。中晚期食道癌患者多并发严重性食道狭窄,导致患者进食困难,严重者甚至无法进食,导致机体无法获得足够的营养以维持正常生命活动,甚至危及生命安全<sup>[2]</sup>。目前临床治疗食道癌导致的食道狭窄患者主要以缓解食管梗阻症状以及改善生活质量作为最主要的目的<sup>[3]</sup>。近年来,随着内镜介入技术的飞速发展,相关研究证实<sup>[4,5]</sup>食管支架置入法不仅能够姑息性解决恶性狭窄引发的进食难题,而且能够提高患者生活质量,对此笔者做了大量相关研究。本文通

过对比观察支架置入法与直线加速器 X 射线照射食管癌晚期食道狭窄的效果、不良反应以及预后情况,来探究支架置入法对食管癌患者的影响,现将结果报道如下。

### 1 资料与方法

#### 1.1 一般资料

选取 2012 年 5 月份至 2013 年 11 月份于我院肿瘤科以“食道癌”为诊断而收入院治疗的患者共 104 例,根据治疗方案分为两组,实验组 52 例和对照组 52 例。实验组患者中男性 31 例,女性 21 例,平均年龄  $54.7 \pm 6.2$  岁;对照组患者中男性 32 例,女性 20 例,平均年龄  $53.9 \pm 6.3$  岁。两组患者性别、年龄等

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作者简介:洪慧玲,女,本科,主治医师,主要研究方向:消化内科疾病的诊治研究

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一般资料具有均衡性,  $P > 0.05$ , 差异不具有统计学意义。

### 1.2 纳入标准

胃镜下取材经病理活检明确诊断为食道癌; 经超声及 CT 等影像学证实存在远处转移, 进入晚期, 失去行根治手术机会; 患者吞咽存在明显困难, 影像学检查可见梗阻存在; 心、肺、肝、肾功能正常; 所有患者均为自愿参与, 已签署知情同意书; 本实验获得获医院伦理委员会审批, 且伦理委员会跟踪本研究全过程<sup>[6]</sup>。

### 1.3 排除标准

存在其他恶性肿瘤; 并发心脑血管、糖尿病等其他基础疾病; 精神异常者。

### 1.4 治疗方法

**1.4.1 对照组** 所有患者均行食道 CT 和食道造影、X 线摄片检查, 确定放疗长度和宽径, 采用直线加速器 X 射线照射, 2 GY/ 次, 每周 5 次, 总剂量 60~70 GY/6~7 周。

**1.4.2 实验组** 采取置入食管支架治疗, 本实验中所用支架均为记忆钛镍合金带膜支架, 具体方法为: 在 X 线监测下, 运用电子胃镜同步辅助, 利用超滑导丝和 Cobra 导管缓慢通过狭窄部位后, 狹窄长度进行准确测量后, 根据狭窄长度选择长度适宜的支架(上下各加 2 cm), 通过球囊扩张, 沿着导丝置入食管支架, 随后在 X 线辅助下, 对支架的位置进行调整, 以支架底端超过狭窄末端约 2 cm 左右为佳。术后通过 X 线透视观察支架位置放置的是否得宜, 支架是否撑开以及支架是否移位等情况。两组患者放疗前血常规、肝肾功能、心电图等检查情况基本正常, 无放疗禁忌。治疗期间同时给予全身支持治疗等辅助治疗。

疗, 尽量避免发生并发症。

### 1.5 观察指标以及判定标准

**1.5.1 梗阻情况治疗效果判定** 参照文献报道<sup>[7]</sup>, 治疗 14 d 后对梗阻治疗效果进行评价, 本病共分为显效, 有效以及无效共 3 个标准。显效: 患者能够进食软食, 且不发生呕吐, 患者自觉无明显梗阻感; 有效: 患者能够进食半流质或流质, 且不发生呕吐, 患者自觉无明显梗阻感; 无效: 虽然能够进食半流质或流质, 但是仍有呕吐发生, 患者自觉梗阻感明显。

**1.5.2 生存质量评价方法** 参照 2014 年我国制订的肿瘤患者生活质量评分法<sup>[8]</sup>(缩写为 QOL), 在患者治疗前后分别进行 QOL 评分, QOL 分数越高, 生活质量越高。

### 1.6 统计学方法

实验数据应用统计学软件 SPSS.19.0 进行分析, 计量资料采用 t 检验分析, 计数资料采用卡方检验分析, 若  $P < 0.05$ , 则差异具有统计学意义。

## 2 结果

### 2.1 支架植入情况

本实验中共有 52 例患者进行了支架置入治疗, 全部患者均成功置入支架, 支架撑开完全, 未见支架移位的情况发生。

### 2.2 两组患者梗阻情况比较

治疗前, 两组患者的梗阻情况无显著性差异( $P > 0.05$ ); 治疗后, 实验组梗阻缓解情况显著优于对照组, 其显效率以及总有效率(显效 + 有效)显著高于对照组,  $P < 0.05$ , 差异具有统计学意义, 详见表 1。

表 1 两组梗阻治疗情况比较(%)  
Table 1 Comparison of obstruction treatment(%)

Group	n	Excellence	Effective	Invalid	Total Efficient Rate(%)
Experimental group	52	34	14	4	92.31
Control group	52	16	24	12	76.91
X <sup>2</sup>	-	-	-	-	
P	-	-	-	-	0.036

### 2.3 两组患者生存质量比较

治疗前两组患者的生活质量评分无显著性差异( $P > 0.05$ ), 经过治疗后, 两组患者的 QOL 评分均有好转, 治疗后实验组患

者的 QOL 与对照组比较明显升高,  $P < 0.05$ , 差异具有显著性, 详见表 2。

表 2 两组患者生存质量比较( $\bar{x} \pm s$ )  
Table 2 Comparison of QOL( $\bar{x} \pm s$ )

Group	n	Before treatment	After treatment
Experimental group	52	19.37 ± 6.51	42.61 ± 5.23*
Control group	52	19.83 ± 6.57	34.47 ± 5.28

Note: \* $P < 0.05$ , compared with control group after treatment.

### 2.4 两组患者不良反应情况比较

本实验中, 治疗期间的主要不良反应有胸痛、发热、消化道

出血以及恶心呕吐, 实验组不良反应总发生率为 36.54%, 与对照组 38.48% 比较,  $P > 0.05$ , 差异不具有统计学意义, 如表 3。

表 3 两组患者不良反应比较  
Table 3 Comparison of adverse reactions

Group	n	Pectoralalgia	Fever	Gastrointestinal hemorrhage	Nausea and vomiting	Incidence(%)
Experimental group	52	6	4	4	5	36.54
Control group	52	4	5	6	5	38.48
X <sup>2</sup>	-	-	-	-	-	33.73
P	-	-	-	-	-	0.995

## 2.5 两组患者生存情况比较

跟踪随访,两组患者在3个月内及6个月内的生存率无显

著性差异,但对照组的1年生存率高于实验组,P<0.05,差异具有显著性,详见表4。

表4 两组生存情况比较

Table 4 Comparison of survival rate[n(%)]

Group	n	3 months (case)	6 months (case)	>1 year(case)
Experiment group	52	6(11.5)	9(17.3)	37(71.1)
Control group	52	3(5.8)	6(11.5)	43(82.7) <sup>#</sup>

Note: compared with control group, #P<0.05.

## 3 讨论

近年来,食道癌发病率呈明显上升趋势,目前已成为临床常见的恶性肿瘤之一<sup>[9-11]</sup>。现今食道癌的治疗方法仍以根治性手术为主,但是对于中晚期的患者而言,已经失去了手术治疗的时机。对于无法手术的食道癌患者可以采取放疗、化疗以及腔内激光治疗等姑息性疗法。但是无论上述何种方法,均具有高风险性,容易外发全身性创伤,而且狭窄复发率较高,无法从根本上解除吞咽困难的症状<sup>[12]</sup>。目前临床缓解食道癌患者吞咽困难的主要手段为应用化疗、放疗和食道支架植入术。由于食道癌患者已经不能进食,所以要严格控制患者的药物摄入,因此本实验中选取直线加速器X射线照射法作为对照疗法。支架植入术作为新型治疗手段,已经广泛应用在临床各科疾病的治疗之中<sup>[13]</sup>。相关研究发现<sup>[14,15]</sup>应用食道支架置入法治疗,不仅能够缓解晚期食道癌患者梗阻的严重程度,食道支架置入术能够直接扩张食道,使其直径达到2cm,以符合患者正常进食的需求。此外,与中间部分扩张情况相比,支架两端扩张程度较大,既能促使支架两端与食道壁紧紧贴合,而且能够防止食物进入支架与食道之间的外隙,有效避免食物外漏<sup>[16]</sup>。记忆钛镍合金带膜支架具有良好的坚韧度,不易发生破裂,不仅能够抑制肿瘤向内生长,防止再狭窄,而且能够封闭瘘口<sup>[17]</sup>,避免食物外漏,有效预防胸内感染、呼吸衰竭等并发症的发生<sup>[18,19]</sup>。而且目前内镜技术发展较为成熟,通过内镜不仅能直视操作、准确定位,及时调整放置支架的位置,确保在最准确部位置入释放支架,而且能够观察支架位置是否发生偏离,一旦支架发生移位可在内镜直视下直接调整,有效提高了扩张置架的安全性<sup>[20]</sup>。为了探讨支架置入法对于食道癌患者的治疗价值,本文选择对其治疗效果及预后情况进行对比分析。

本实验中,两组患者梗阻情况比较显示:治疗前,两组患者梗阻严重程度无显著性差异,治疗后,两组均可见梗阻缓解情况发生,但是实验组患者的梗阻治疗总有效率高达92.31%,显著高于与对照组,差异具有显著性(P<0.05),提示支架置入法能够显著缓解食道癌患者食道梗阻情况,解决进食困难的问题。两组患者生活质量比较显示:治疗前,两组患者生活质量相近,治疗后,两组患者的生活质量均有改善,实验组患者的QOL评分高达(88.78%)显著高于对照组(66.67%),提示支架置入法能够改善食道癌患者的生活质量;两组患者不良反应比较显示:治疗期间,两组患者均有不良反应发生,实验组不良反应总发生率为(36.54%)与对照组(38.48%)相仿,差异不具有显著性(P>0.05),提示支架置入法不良反应小,安全性好。两组生存情况比较显示:在短期生存率上(6个月内)两组的生存率无

显著性差异,但对照组年生存率高于实验组,提示支架置入法虽然疗效显著,但并不能延长患者生存时间。

综上所述,直线加速器X射线照射法和支架置入法均为食道癌食道狭窄的有效手段,支架置入法短期疗效立竿见影,能够迅速缓解梗阻症状,提高患者生活质量,但并发症较多,远期生存率不高,放射治疗然短期效果不显著,但能够抑制肿瘤生长,有效延长患者生存期,建议临床可将二者结合应用。

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