DOI:10.16016/j.1000-5404.1996.02.014

cell interactions in the liver. Semi in Liver Dis,1993;13(1):13
2 Goss JA, Mangino MJ, Callery MP *et al*. Postaglandin E_2 downregulates Kupffer cell production of IL-1 and IL-6 during hepatic regeneration. Am Physio Soci,1993;193:G601
3 Callery MP, Kamei T, Flye MW *et al*. Kupffer cell tumor necrosis factor-alpha production is suppressed during liver regeneration. J Surg Res,1991;50:515
4 Beyer HS, Stanley M, Theologides A *et al*. Tumor necrosis factor-alpha increases hepatic DNA and RNA and hepatocyte mitosis. Biochem Int,1990;22:405

(收稿:1995-07-27;修回:1996-03-25)
(编辑 仇玉福)

Study of the effects of Kupffer cell-released TNF-α and EGF on liver regeneration after partial hepatectomy in rats

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Abstract The changes of the levels of TNFα and epidermal growth factor (EGF) released by the Kupffer cells (KCs) after two-thirds partial hepatectomy (PH) were observed in rats. It was found that the TNFα level released by KCs reached the peak of elevation in the 6th hour after PH, went down in the 24th hour with a level lower than that of the sham-operated group (SO) and restored the SO Level in a week after PH. The level of EGF released by KCs showed no significant changes in the first 24 hours after PH, was significantly elevated in the 24th to 48th hour and gradually decreased 48 hours after surgery which was still higher than the SO level. The findings indicate that a large amount of EGF is released by KCs after PH to promote liver regeneration and TNFα exerts its effects only after the initiation of liver regeneration.

Key words partial hepatectomy; liver regeneration; tumor necrosis factor; epidermal growth factor

晚期肺癌合并肺不张的放射治疗

Radiotherapy of advanced carcinoma of lung complicated with atelectasis

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1 资料与方法

1.1 临床资料

51例晚期肺癌合并一叶以上肺不张,男性50例,女性1例,年龄38～81岁,平均57岁。鳞癌43例,腺癌4例,小细胞癌2例,未分型2例。全部病例均有X光片及CT检查,41例经支纤镜检查证实。患者非随机分为2组:先内照射组13例,12例为一侧全肺不张,且有2例是外照射后复发引起,1例为二叶肺不张。单纯外照射组38例:5例为一侧全肺不张,33例为一叶以上肺不张。肺不张时间最短半月,最长超过半年,一般为1/2～3月。有3例发现有远处转移。

1.2 治疗方法

1.2.1 先内照射组 经支纤镜将施源管插入阻塞支气管区,经模拟机摄片,据胸片、CT确定靶区范围、长度,参考点距离为离施源管中轴外10～15 cm,通过治疗计划系统优选最佳治疗方案。每次8～10 Gy,间隔一周,共2～3次,总量20～30 Gy,疗后一周10例辅以外照射,其方法与剂量和单纯外照射组相同。

1.2.2 单纯外照射组 先采用大野包括肿瘤边缘外2～3 cm,纵隔、双侧肺门、隆突区放疗8MVX肿瘤照射量40 Gy/4周,然后再缩野包括局部肿瘤及受阻塞的支气管部分为主,通常还包括同侧肺门、隆突及半边纵隔放疗,肿瘤吸收剂量为20～30 Gy/2～3周,均为2 Gy/每次。

2 结果

2.1 症状改善情况

2.1.1 先内照射组 一般内照射一次或二次后呼吸困难等症状均有不同程度改善,疗毕有10/13(77%)例病人症状明显改善,都能耐受内照射,仅1例由于远处转移未能坚持外照射。

2.1.2 单纯外照射组 一般达肿瘤吸收剂量40 Gy/4周后病人症状可逐渐改善,疗毕23/38(60.5%)例症状明显改善,有2例病情恶化而中断放疗。

2.2 肺复张情况

2.2.1 先内照射组 内照射后,肺部分和完全复张12/13(92%)例。仅1/13(8%)例肺未能复张。

2.2.2 单纯外照射组 外照射后,肺部分和完全复张24/38(63%)例,有14/38(37%)例肺未能复张,两组对比 $P<0.05$。

2.3 生存率

先内照射组与单纯外照射组1年生存率分别为5/13(38.5%)和15/38(39.5%),2年生存率分别为2/13(15.4%)和

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Effects of eosinophil component inhalation on respiratory responsiveness in guinea-pigs

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Abstract Eosinophils were collected from the peritoneal exudates of guinea-pigs pretreated with polymyxin B and the solution containing the protein of eosinophilic granules was prepared. After aerosolization, the solution was inhaled by guinea-pigs. It was found that the PC_{20} value was significantly decreased 60 minutes after inhalation ($P<0.01$). No obvious change of total cell count and eosinophil count but marked increase of epithelial cells in the bronchoalveolar lavage fluid (BALF) were found after inhalation. In addition, the increase of epithelial cells in BALF was correlated to the decrease of PC_{20}. On the basis of these findings, it is concluded that eosinophils can induce hyperresponsiveness of the respiratory tract through the injury of its epithelium.

Key words eosinophil; epithelium/respiratory; hyperresponsiveness; guinea-pigs

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4/38(10.5%)，两组对比 $P>0.05$，差异无统计学意义。30/45(66.7%)例死亡病例都在疗后一年内死于远处转移。

3　讨论

3.1　生活质量与症状改善

晚期肺癌合并肺不张的治疗，Kohek[1]、Macha[2]报道用Nd-YAG激光结合高剂量率内照射支气管阻塞性肺癌，60%～70%的病人症状明显改善。本文先内照射组治疗后77%的病人症状明显改善，病人都能耐受治疗，而单纯外照射组疗毕60.5%的病人症状明显改善，有2例病情恶化不能坚持外照射，所以先内照射组比单纯外照射组有治疗次数少，反应轻，能耐受，症状改善快的优点。作者认为对于晚期肺癌合并肺不张的治疗可考虑首选腔内放疗，较迅速改善病人症状，提高了病人的生存质量，有利于下一步治疗。

3.2　肺复张与肺不张的时间和治疗方式的关系

先内照射组与单纯外照射组治疗后肺完全复张与部分复张分别为92%和63%，且肺不张的时间均在1/2～3月。疗后肺未能复张的病例先内照射组仅8%，其肺不张的时间超过半年；单纯外照射组有37%，其肺不张的时间在2～7月。两组对比，$P<0.05$，差异有统计学意义。由此说明肺复张与治疗方式有关，与肺不张时间的长短有一定关系，超过半年者复张困难。先内照射组对于肺复张优于单纯外照射，是由于内照射局部剂量高，癌组织变性、坏死、萎缩快，较迅速解除梗阻，使肺尽快复张。而单纯外照射组肿瘤局部剂量低，解除梗阻较慢，延长了肺不张的时间。

3.3　生存率

Cotter[3]报道对65例不能手术的支气管阻塞性肺癌，用内照射加外照射进行治疗，1年生存率为38%，2年生存率为23%。本文结果与国外文献报道相似。先内照射组与单纯外照射组1年生存率分别为38.5%和39.5%，2年生存率分别为15.4%和10.5%。两组1年，2年生存率无明显差异，由此说明晚期肺癌合并肺不张治疗后生存率与肺不张时间长短、治疗方式、肺复张可能无明显关系，造成此结果的原因系本文全部病例为晚期，有3例疗前已有远处转移，还有2例是外照射后复发引起，另有2例未坚持完成外照射，只能进行姑息性治疗有关。66.7%的病人疗后一年内死于远处转移，所以放疗肺叶复张后，远处转移是一个急待解决的问题，放疗前、中、后配合化疗，免疫治疗等综合治疗，可能会提高生存率，有待进一步分组研究。

关键词　肺不张；放射疗法

中图法分类号　R563.4

参考文献

1 Kohek P, Pakisch ZB, Rehak P *et al*. Nd-YAG laser debalking combined with Ir-192 HDR brachytherapy for obstructing cancer of the central bronchial airways: technique and results. Activity, 1990; 1(suppl): 45

2 Macha HN, Koch K, Wahlers B *et al*. Endoliumincal irradiation in obstructing bronchial tumors. Activity, 1990; 1 (suppl): 38

3 Cotter GW, Lariscy C, Ellingwood KE *et al*. Inoperable endobronchial obstructing lung cancer treated with combined endobronchial and external beam irradiation: a dosimetric analysis. international journal of radiation oncology. Biology Physics, 1993; 27(3): 531

（收稿：1995-05-06；修回：1995-12-22）

（编辑　冯崇英）

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