

结直肠黏液腺癌与非黏液腺癌化疗疗效差异及其机制

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Title: Research on the efficacy of chemotherapy and mechanism of difference of efficacy for colorectal mucinous adenocarcinoma and non-mucinous adenocarcinoma

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摘要: 结直肠癌的病理类型众多,而黏液腺癌是结直肠癌中一种特殊的病理类型。与结直肠非黏液腺癌相比,黏液腺癌的化疗疗效通常不理想,两者疗效差异的机制可能与结直肠黏液腺癌的分子生物学特征及黏液的物理性质有关。本文对结直肠黏液腺癌和非黏液腺癌化疗疗效差异及其机制作一综述,以期对临幊上结直肠黏液腺癌的治疗起到积极的指导作用。

Abstract: There are many pathological types of colorectal cancer, and mucinous adenocarcinoma is a special pathological type of colorectal cancer. Mucinous adenocarcinoma is usually less effective in chemotherapy compared with colorectal non-mucinous adenocarcinoma, the mechanism of difference may be related to molecular biological characteristics and physical properties of mucus in colorectal mucinous adenocarcinoma. This article reviews the chemotherapy efficacy and the mechanism of difference of efficacy for colorectal mucinous adenocarcinoma and non-mucinous adenocarcinoma, in order to provide the positive guidance for the clinical treatment of colorectal mucinous adenocarcinoma.

参考文献/REFERENCES

- [1] Torre LA, Bray F, Siegel RL, et al. Global cancer statistics, 2012 [J]. CA Cancer J Clin, 2015, 65(2): 87-108.
- [2] Fitzmaurice C, Dicker D, Pain A, et al. The global burden of cancer 2013 [J]. JAMA Oncol, 2015, 1(4): 505-527.
- [3] Ott C, Gerken M, Hirsch D, et al. Advanced mucinous colorectal cancer: Epidemiology, prognosis and efficacy of chemotherapeutic treatment [J]. Digestion, 2018, 98(3): 143-152.
- [4] Huang Y, Alzahrani NA, Liauw W, et al. Survival difference between mucinous vs non-mucinous colorectal cancer following cytoreductive surgery and intraperitoneal chemotherapy [J]. Int J Hyperthermia, 2018, 21(34): 1-7.
- [5] Nische U, Friess H, Aaha A, et al. Prognosis of mucinous and signet-ring cell colorectal cancer in a population-based cohort [J]. Cancer Res Clin Oncol, 2016, 142(11): 2357-2366.
- [6] Hugen N, Verhoeven RH, Radema SA, et al. Prognosis and value of adjuvant chemotherapy in stage III mucinous colorectal carcinoma [J]. Ann Oncol, 2013, 24(11): 2819-2824.
- [7] Andre T, De Gramont A, Vernerey D, et al. Adjuvant fluorouracil, leucovorin, and oxaliplatin in stage II to III colon cancer: Updated 10-year survival and outcomes according to BRAF mutation and mismatch repair status of the MOSAIC study [J]. Clin Oncol, 2015, 33 (35) : 4176-4187.
- [8] De hao Yu, De Gramont A, Vernerey D, et al. The differences on efficacy of oxaliplatin in locally advanced colon cancer between mucinous and nonmucinous adenocarcinoma [J]. Cancer Medicine, 2018, 7 (3) : 600-615.
- [9] Chand M, Rasheed S, Bhangu A, et al. Adjuvant chemotherapy improves overall survival after TME surgery in mucinous carcinoma of the rectum [J]. Eur J Surg Oncol, 2014, 40(2): 240-245.
- [10] Yu SKT, Chand M, Tait DM, et al. Magnetic resonance imaging defined mucinous rectal carcinoma is an independent imaging biomarker for poor prognosis and poor response to preoperative

- chemoradiotherapy [J] .Eur J Cancer, 2014, 50(5): 920-927.
- [11] Oberholzer K, Menig M, Kreft A, et al.Rectal cancer: Mucinous carcinoma on magnetic resonance imaging indicates poor response to neoadjuvant chemoradiation [J] .Int J Radiat Oncol Biol Phys, 2012, 82 (2) : 842-848.
- [12] McCawley N, Clancy C, O' Neill BD, et al.Mucinous rectal adenocarcinoma is associated with a poor response to neoadjuvant chemoradiotherapy: A systematic review and Meta-analysis [J] .Dis Colon Rectum, 2016, 59(12): 1200-1208.
- [13] Hugen N, Van de Velde CJ, Bosch SL, et al.Modern treatment of rectal cancer closes the gap between common adenocarcinoma and mucinous carcinoma [J] .Ann Surg Oncol, 2015, 22 (8) : 2669-2776.
- [14] Simha V, Kapoor R, Gupta R, et al.Mucinous adenocarcinoma of the rectum: A poor candidate for neoadjuvant chemoradiation [J] ?Gastrointest Oncol, 2014, 5 (4) : 276-279.
- [15] Oberholzer K, Menig M, Pohlmann A, et al.Rectal cancer: Assessment of response to neoadjuvant chemoradiation by dynamic contrast-enhanced MRI [J] .Magn Reson Imaging, 2013, 38(1): 119-126.
- [16] Hugen N, Simon M, Halilovic 'A, et al.The molecular background of mucinous carcinoma beyond MUC2 [J] .J Pathol, 2014, 1(1): 3-17.
- [17] Garcia-Aguilar J, Chen ZB, Smith DD, et al.Identification of a biomarker profile associated with resistance to neoadjuvant chemoradiation therapy in rectal cancer [J] .Ann Surg, 2011, 254 (3) : 486-492.
- [18] Catalano V, Loupakis F, Graziano F, et al.Mucinous histology predicts for poor response rate and overall survival of patients with colorectal cancer and treated with first-line oxaliplatin- and/or irinotecan-based chemotherapy [J] .Br J Cancer, 2009, 100(6): 881-887.
- [19] Negri FV, Wotherspoon A, Cunningham D, et al.Mucinous histology predicts for reduced fluorouracil responsiveness and survival in advanced colorectal cancer [J] .Ann Oncol, 2005, 16(8): 1305-1310.
- [20] Roberto M, Domenico A, Maurizio M, et al.Mucinous histology of colon cancer predicts poor outcomes with FOLFOX regimen in metastatic colon cancer [J] .J Chemother, 2012, 24(4): 212-216.
- [21] H Debuinne,W Ceelen.Mucinous differentiation in colorectal cancer: Molecular, histological and clinical aspects [J] .Acta Chir Belg, 2013, 113(6): 385-390.
- [22] Hugen N, Gina B, Robert GJ, et al.Advances in the care of patients with mucinous colorectal cancer [J] .Nat Rev Clin Oncol, 2013, 13(6): 361-369.
- [23] Ribic CM, Sargent DJ, Moore MJ, et al.Tumor microsatellite-instability status as a predictor of benefit from fluorouracil-based adjuvant chemotherapy for colon cancer [J] .N Engl J Med, 2003, 349(3): 247-257.
- [24] Glasgow SC, Yu J, Carvalho LP, et al.Unfavourable expression of pharmacologic markers in mucinous colorectal cancer [J] .Br J Cancer, 2005, 92(2): 259-264.
- [25] Braun MS, Richman SD, Quirke P, et al.Predictive biomarkers of chemotherapy efficacy in colorectal cancer: Results from the UK MRC FOCUS trial [J] .Clin Oncol, 2008, 26(16): 2690-2698.
- [26] Ntavatzikos A, Spathis A, Patapis P, et al.Integrating TYMS, KRAS and BRAF testing in patients with metastatic colorectal cancer [J] .World J Gastroenterol, 2017, 23(32): 5913-5924.
- [27] Stylianopoulos T, Jain RK.Combining two strategies to improve perfusion and drug delivery in solid tumors [J] .Proc Natl Acad Sci USA, 2013, 110(46): 18632-18637.

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