# Treatment strategy for patients with colorectal cancer in tumor hospitals under the background of new coronavirus pneumonia

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**Summary**

In December 2019, the outbreak of new coronavirus pneumonia began to spread, its pathogen is 2019-nCoV, has a strong infectious, generally susceptible to the characteristics of the population. At present, the prevention and control situation of the new coronavirus pneumonia i this context, as a front-line medical workers shoulder important responsibilities and pressures, but through our strict management strat minimize the risk of exposure to infection. Through the progress of research and the summary of the guidelines in recent years, the aut summarizes the disease screening and treatment strategies of colorectal cancer (including early colorectal cancer, local late colorectal ca obstructive colorectal cancer, metastatic colorectal cancer and treatment of patients after new complementary treatment), drug selection and time limit selection of complementary treatment, In the aspects of the protection measures of emergency surgery patients, postoperative patient review and medical personnel's protection, the treatment strategy has been improved, with a view to providing more choices for the majority of patients in the severe situation of the new coronavirus pneumonia outbreak, so as to obtain the best treatment and to provide a more timely treatment model for all of you.

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In December 2019, Wuhan first confirmed the first case of new coronavirus pneumonia (new coronavirus pneumonia, corona virus disease 2019, COVID-19), followed by a nationwide outbreak of new coronary pneumonia. On February 12, 2020, the International Committee on Virus Classification officially named the new coronal pneumonia pathogen 2019-nCoV; The infection index (R0) of 2019-nCoV by epidemiological study is 2.2, which is generally susceptible to the population[1,2,3]。 But under the overall coordination of the Chinese government and the National Health and Health Commission, the current epidemic prevention and inspection work has achieved a decisive victory! However, we can not afford to lose the heart, the fight against the epidemic is still on the road.

Colorectal cancer is a common malignant tumor, with the latest data from the American Cancer Society showing that colorectal cancer has the third highest incidence and mortality rate[5]According to the latest data released by the National Cancer Center, the incidence of colorectal cancer in China is the 3rd highest, and the mortality rate is the 5th, which is a serious threat to the nation's life and health.[6]。 Cancer patients are often accompanied by low immunity, poor nutritional status and the combination of other system primary diseases, under the new coronary pneumonia outbreak, is a relatively high-risk population. At the same time, the treatment of colorectal cancer tumor is also very urgent. Therefore, how to balance the relationship between new coronary pneumonia and colorectal tumor, do a good job of strict prevention and control measures, the development of individual treatment programs

**Table 1** Recommendations for treatment strategies for patients with colorectal cancer in the outbreak of new coronavirus pneumonia

**The relationship between colorectal cancer patients and new coronal pneumonia**

**Second, strengthen pre-hospital screening strategy**

**Figure 1 Flow** of patients admitted to hospital during the outbreak of new coronavirus pneumonia at the Fourth Hospital of Hebei Medical University

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Label Keywords

We recommend

is particularly important. In this paper, from the screening, treatment, follow-up, protective measures and so on, the treatment strategy of thinking and improving, in order to make colorectal cancer patients get the best treatment under the severe situation of the new coronary pneumonia epidemic. See Table 1. The following prevention and treatment strategies are developed for non-new coronary pneumonia infection of colorectal cancer patients, hereby explain.

表1 新型冠状病毒肺炎疫情下结直肠癌患者治疗策略推荐

| 干预分组 | 患者分层 | 治疗建议 | 时限选择 |
|---|---|---|---|
| 门诊筛查 | 肠镜或指诊正常 | 追问流行病史，必要时定点医院就诊，类便核酸检测 | |
| | 需要住院治疗患者 | 预约制 | |
| 早期结直肠癌患者 | 癌前病变 | 观察<br>内镜治疗<br>手术治疗 | 适当推迟治疗，定期随诊 |
| | T1N0M0 | 内镜治疗或手术治疗 | 适当推迟治疗，定期随诊 |
| | T2N0M0 | 手术治疗 | |
| 局部晚期结直肠癌 | T4b 结肠癌 | 新辅助化疗 | 2~3 周期评估，择期手术 |
| | T1~4N1~2M0 结直肠癌 | 建议新辅助治疗 | 适当延迟手术时间 |
| | 肿瘤距肛缘 ≤12 cm以内的T1~4N0或N+M0直肠癌 | 推荐术前新辅助放化疗，长程同步放化疗，全程新辅助治疗（TNT）模式（临床研究） | |
| | 肿瘤距肛缘 ≤12 cm以内的T1~4N1~2M0直肠癌 | 可以考虑短程放疗 | 适当推迟手术治疗时间 |
| | 肿瘤距肛缘>12 cm 局部进展期直肠癌 | 参照局部进展期结肠癌 | 适当推迟手术治疗时间 |
| 梗阻性结直肠癌 | 完全梗阻 | 手术治疗，梗阻严重，肠道准备较差、一般状况比较差的患者，一期造口或者预防性造口 | 即刻治疗 |
| | 一般状态较好的完全梗阻 | 尝试肠梗阻导管或者肠道支架的置入 | |
| | 不全梗阻患者 | 首先考虑肠道支架置入，成功后行新辅助治疗 | 适当推迟手术治疗时间 |
| 转移性结直肠癌 | 初诊患者 | 多学科诊疗模式（MDT） | 选择周期时间长、医院暴露时间短的方案 |
| | | 一线以奥沙利铂为主推荐：CapeOX | |
| | | 一线以伊立替康为主推荐：XELIRI | |
| | 已经在治疗患者 | 疾病控制稳定：可单药卡培他滨暂时维持 | 在可以耐受副反应的前提下，选择周期长、医院暴露时间短的方案 |
| | | 使用西妥昔单抗患者，建议单周更换方双周疗案 | |
| | | 使用贝伐珠单抗患者，建议双周更换为3周疗案 | |
| | 进展患者 | 线上 MDT，确定下一步方案 | 避免医院暴露 |
| 新辅助治疗后患者 | 预约根治性手术 | 可考虑在等待间期CapeOX | 建议适当延迟手术时间，8~12周 |
| | 临床完全缓解患者 | 手术意愿不强烈，等待观察策略<br>手术意愿强烈：可暂进行观察或化疗 | 延长根治性手术或种放性手术时间，定期随访 |
| 辅助治疗患者 | Ⅱ期高危 | T4期患者：可建议CapeOX 方案3个月<br>其他高危患者：CapeOX 方案6个月 | 选择周期时间长、医院暴露时间短的方案，减少总体化疗时间 |
| | T3N1 低危 | 建议CapeOX 方案3个月 | 选择周期时间长、医院暴露时间短的方案，减少总体化疗时间 |
| | T4或 N2高危 | 建议CapeOX 方案6个月 | 选择周期时间长、医院暴露时间短的方案 |
| 急诊患者 | 明确流行病学史 | 二级防护，终末消毒 | 即刻进行治疗 |
| | 不明确流行病学史 | 按感染者对待，三级防护，终末消毒 | 即刻进行治疗 |

**Table 1** Recommendation sought in treatment strategies for patients with colorectal cancer in the outbreak of new coronavirus pneumonia

### The relationship between colorectal cancer patients and new coronal pneumonia

Zhang Peng and Tao Kaixiong[7]Reported that there are 6 cases of gastrointestinal tumor symbiosis combined with new coronary pneumonia in Tongji Medical College affiliated hospital of Huazhong University of Science and Technology, of which there were 3 cases of postoperative fever and 2 deaths. Chan, etc.[8]The study found that patients infected with SARS-Cov in 2003 were able to develop intestinal symptoms, an extra-pulmonary organ that detects live viruses, and the study found that seven human intestinal cell lines, DLD-1, HCT-116, HT-29, LoVo, LS-180, SW-480 and SW-620 were tested and found that LoVo had the potential to contract SARS-CoV. The 2019-nCoV and SARS viruses are highly homogenetoted, and therefore 2019-nCoV may also have the possibility of intestinal infections. Professor Yang Zhixuan, Third Hospital affiliated with Zhongshan University, etc.[9]The nucleic acid test for negative patients with the negative pharynx swab test for the new coronary pneumonia easswastomy was found to be positive for nucleic acid in 3 patients. A *newly* published clinical study of 1,590 new cases of coronary pneumonia found that 18 (1%) had a history of cancer and that patients who had undergone chemotherapy or surgery in the past month had a higher risk of serious clinical events (75 percent vs. 43 percent)[10]。 Therefore, for gastrointestinal surgery clinics, especially patients with intestinal symptoms, need to be extra vigilant, first of all in the consultation process need to do a good job of strict personal protection, second in the case of finger ingestion or electronic colonoscopy screening results negative, do not ignore the possibility of new coronary pneumonia, must ask the patient's epidemiological exposure history, If necessary, it is recommended that patients visit a designated hospital to perform a pharynx swab or feces 2019-nCoV nucleic acid test to avoid missing respiratory symptoms of the typical new coronary pneumonia infection.

### Second, strengthen pre-hospital screening strategy

For patients who need to be hospitalized, they must be subject to intensive screening out of the clinic, and for this reason a detailed pre-hospital screening strategy has been established at the Fourth Hospital of Hebei Medical University, see Figure 1. Outpatient set up a full-time screening physician, patients into the hospital, need to be epidemiological history screening and temperature measurement, enter the clinic area need to be epidemiological history screening and temperature measurement, medical treatment needs to wear a mask, enter the clinic requires no family escort, strictly in accordance with the one-person one-patient system, to avoid the occurrence of cross-infection. At the time of consultation, the attending doctor first needs to be screened for an epidemiological history and ask for body temperature before carrying out normal medical activities. For patients with fever or a history of epidemiological exposure, a fever clinic needs a primary screening, the elimination of new coronary pneumonia patients before a specialist visit, if necessary, CT testing or nucleic acid testing. Outpatient set up a full-time pre-inpatient screening physician, for patients who regularly make an appointment for chemotherapy inpatient, need outpatient screening epidemiological history, blood routine and chest CT examination, check no abnormalities before

admission. For patients who need inpatient surgery, all appointment system is adopted, after outpatient screening, unified for hospitalization. The screening results take into account the presence of blood routine abnormalities or THE presence of VIRAL pneumonia in CT, the hospital is suspended, and the hospital is recommended for treatment.

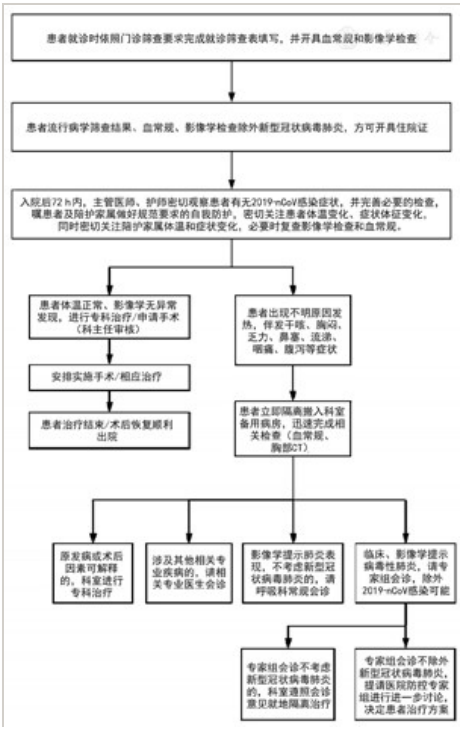


**Figure 1** A flow of patients admitted to hospital during the outbreak of new coronavirus pneumonia in the Fourth Hospital of Hebei Medical University

**Treatment strategy for patients with early colorectal cancer**

**1. Treatment options for precancerous lesions:**

For electronic colonoscopy diameter of 5 mm polyps have clinical therapeutic value, it is generally recommended that endoscopic treatment complete lycilloscope, if the polyps are large (diameter of 2 cm or for mucosal adenoma) patients can also consider a step-by-step endoscopic mucosal excision (piecemeal endoscopic mucosal resection, PEMR)[11]。 Some pathological considerations are for precancerous lesions but large lesions, endoscopic can not be removed patients, can also choose the treatment of the cure or local surgery to remove. But for pathological diagnosis considered as atypical growth of patients who have not been cancerous, because adenoma development into cancer still takes some time, in the severity of the new coronary pneumonia outbreak infection, it is recommended to delay the appropriate time for treatment, the length of the delay needs to be based on the outbreak control situation and the lead physician to consult together. During the observation period need to closely observe the patient's symptoms, patients need regular follow-up, if the outbreak is lifted time of 1 month, it is recommended that patients can review 1 time of 1 colonoscopy; If symptoms worsen during the observation period, check at any time.

**2. Treatment options for early colorectal cancer:**

Early $T_1N_0M_0$ colorectal cancer patients, due to better prognosis, treatment methods of endoscopic treatment and surgical treatment, it may be recommended that patients appropriately delay the treatment time; If the patient's will to treat strong, after strict outpatient screening can be admitted to the hospital treatment, in the treatment method selection recommended in-oscopic treatment mainly, so that patients recover quickly after surgery, hospital exposure time is short, can reduce the chance of infection. Patients with tumors below the edge of less than 8 cm and the tumor diameter of 3 cm may also be considered for surgical removal. But in patients with$_{stage}$ 1 colorectal cancer, there is also the possibility of lymph node metastasis[12]。 In endoscopic or partial excision, it is necessary to need to be fully evaluated by high-resolution nuclear magnetic and intracavity ultrasound, and regular follow-up tumor markers and CT examinations are required after surgery. Therefore, for patientswith better prognosis, endotherapy is their preferred treatment, and it is also recommended that treatment can be appropriately delayed during special periods, with follow-up and screening methods similar to $T_1N_0M_0$. If the

patient's willingness to treat is strong, after admission to the hospital to carry out the final surgery to remove, in a conditional hospital, recommended laparoscopic surgery.

## Treatment strategies for local late colorectal cancer

### 1. Treatment options for localadvanced colon cancer:

For imaging to assess colon cancer with large tumor sizes, invasive ness and levels of $_{T4}$b, the guidelines recommend new assisted chemotherapy. For imaging assessment of initial lycative colon cancer, it is recommended to have a cure surgical removal, and it is controversial to have new assisted chemotherapy for this type of local progressive colon cancer that can be surgically removed. In 2019, the American Society of Clinical Oncology (American Society of Clinical Oncology, ASCO) conference reported on the FOxTROT study in Europe[13]As a result, a total of 1,052 patients with local progressive colon cancer ($cT_{3\ to\ 4}N\ 0\ to_2M_{0)}$in the study showed that the new auxiliary chemotherapy group had a better period altimeter effect, with 59% of patients with tumor withdrawal and 3.4% of patients with tumor severance completely. The COLARC research initiated by Professor Cai Sanjun and the OPTICAL study initiated by Professor Wang Jianping both discussed the new complementary chemotherapy for localized advanced colon cancer. Preliminary results from the COLARC study show that the clinical remission rate of new auxiliary chemotherapy for colon cancer is 68%, and has a high safety.[14]。 Therefore, under the influence of the current epidemic, for local tumors without bleeding, perforation or obstruction of $cT_4$b stage of local progressioncolon cancer patients, it is highly recommended to carry out new auxiliary chemotherapy, 2 to 3 cycles after evaluation of efficacy, determine the timing of surgery; Pay attention to the patient's symptoms during treatment, and see if the tumor progresses.

### 2. Treatment options for local advanced rectal cancer:

For the tumor from the edge within 12 cm of $T_{3\ to\ 4}$ and/or N - $M_0$ local advanced rectal cancer, the guide recommends the line of new auxiliary chemotherapy, for this part of the patient, need to more clearly inform the patient of the clinical benefits of new auxiliary chemotherapy, for the patient with strong will to operate need to continue to communicate with the patient, do a good job of thinking, so that patients fully understand the clinical efficacy of the new auxiliary radiation chemotherapy, and then after the end of the epidemic. For the new auxiliary chemotherapy guidelines recommend long-range synchronous chemotherapy, can obtain better tumor withdrawal, easy surgical removal, reduce the probability of local recurrence. But for patients with $T_3N_0M_{0,}$ short-range radiotherapy also seems to be a recommended option, with the primary aim of allowing patients to safely survive the outbreak while controlling localized tumors, reducing exposure time in hospitals and avoiding infection. In addition, the application of the total neoadjuvant therapy, TNT model should also be used during this period. "A clinical study showed that the full remission rate in patients in the TNT group - including clinical total remission and pathological total remission (probodyic response, pCR) was 36%, while the total remission rate in the new auxiliary chemotherapy group was 21%[15]。 At present, TNT treatment model is still in the clinical research stage, for patients with local advanced rectal cancer can be recommended into the group TNT treatment study, can reduce the hospital exposure time during the outbreak, and expect to obtain a better clinical complete remission (clinical complete response, cCR) rate. For the tumor from the edge of 12 cm of local progressive period rectal cancer, generally not recommended radiotherapy, the treatment method can refer to the local progression colon cancer model, can be part of the treatment of patients with better compliance, recommended new auxiliary chemotherapy.

## 5. Treatment strategy choice for patients with obstructive colorectal cancer

For patients with colorectal cancer with complete obstruction, conservative treatment can not be improved, surgery is required, and for the choice of surgical method, it is necessary to combine the patient's specific condition. For patients with severe obstruction, poor intestinal preparation and general poor condition, the first stage of oral or preventive mouth-opening is the more recommended option. For some patients in better general condition, try the placement of intestinal obstruction catheters or intestinal stents[16]。 If successful, the patient's general condition can be improved and the patient can be recommended for preoperative complementary treatment in order to survive the outbreak period, while obtaining tumor withdrawal, avoiding the implementation of oral surgery. For patients with low rectal obstruction, metal stents are generally not selected for placement.

For patients with general good condition of incomplete obstruction, you can first consider the placement of intestinal stents, for patients to carry out obstruction diagnosis and treatment, facilitate intestinal nutrition treatment, while recommending stent placement of successful patients for preoperative new auxiliary treatment, hoping to reduce the rate of mouth-opening and avoid infection of new coronary pneumonia[16]。

## Treatment strategies for metastatic colorectal cancer

### 1. Treatment strategies for first-time metastatic colorectal cancer patients:

For first-time metastatic colorectal cancer patients, multidisciplinary treatment model (multi-disciplinary treatment, MDT) is required to develop a safe and effective personalized treatment plan for patients. For first-line chemotherapy options to choose o'Sullivan-based chemotherapy, under the premise of the same efficacy, the first-line program is recommended for a three-week cycle of CapeOX, reducing the patient's exposure time in the hospital. If you need to choose a chemotherapy regimen based on Ilitricon, consider an XELIRI regimen for a three-week cycle. The latest AXEPT study shows that in the Asian population, the use of Iliticon in conjunction with Capetabin is not inferior to the FOLFIRI solution, while XELIRI's options can reduce hospital exposure time, more recommended[17]。

### 2. The person being treated selects the targeted drug:

For patients with metastatic colorectal cancer who are currently undergoing systemic treatment, if the disease is stable, consider a temporary delay in chemotherapy, during which maintenance therapy is performed by oral carpedatin. Clinical research conducted by Professor Xu Ruihua's team at the 2015 ASCO Conference showed that a single-drug cappedabin maintenance therapy for patients with effective chemotherapy programmes could improve patient prognosis[18]。 For patients who are using targeted drugs in combination, a 2-week drug regimen can be selected for users who are treated with a combination of target drugs, and a 3-week option can be selected for users of bebazumab, provided that adverse reactions can be tolerated when applying cibutuathamono injections. For patients who evaluate tumor progression, it is necessary to convene MDT for patients to develop better treatment strategies, it is recommended that online MDT discussions can be conducted through the network platform, to avoid the concentration of medical staff and patients unnecessary hospital exposure history, to develop the next treatment plan, and then to carry out the replacement of the program.

## The choice of patient treatment strategy after the new auxiliary treatment

### 1. Choice of waiting time after new auxiliary chemotherapy:

For patients who complete new complementary treatment and need to make an appointment for curative surgery, it is recommended that patients delay the treatment appropriately, wait for chemotherapy, and recommend CapeOX. A retrospective study of 3,298 patients showed that the pCR rate could be increased for delayed surgery after new complementary chemotherapy[19]。 But the extended time is not unlimited, and too long waiting times may lead to tumor progression. It is generally recommended that surgery be performed 8 to 12 weeks after the new auxiliary chemotherapy, which can be extended to up to 12 weeks for the time being.

### 2. Choice of treatment strategies for patients with cCR:

For patients with cCR after new assisted treatment, the patient can choose a waiting observation strategy or extend the waiting time for surgery in conjunction with the patient's willingness to treat. While there is a debate about waiting for observation strategies, some studies have shown that the overall survival rate of patients who choose waiting for observation strategies is not inferior to that of surgical treatment[20]。 For patients with strong will to treat the disease, patients can be advised to make short-term observation, follow-up 1 time in 2 weeks, diagnosis, rectal and tumor marker screening, wait until the end of the outbreak to carry out a sound assessment, consider the treatment of the root treatment.

## Eight, complementary treatment of drug selection and time limit selection

The complementary treatment of patients with stage II colorectal cancer was stratified. For patients with stage II colorectal cancer with high risk factors, a combination chemotherapy program is recommended and CapeOX is recommended in the present case, but the clinical benefits of combined fluoromyllaline treatment in elderly patients over 70 years of age have not been confirmed, and it is recommended to use capertabine alone. Latest Research Report on ASCO 2019 - PHASE III Clinical Study of IDEA[21]The results showed that subgroup analysis of high-risk ($T_{4)}$patients in stage II showed that the auxiliary treatment effect of 3 months with CapeOX was not as good as 6 months and the toxicity was low, while the effect of 3 months of chemotherapy in the FOLFOX6 program was less effective than 6 months. In the light of the above studies, for high-risk patients in Phase$_{T4,}$ it seems that the CapeOX option (3 months) has an advantage. For patients with colorectal cancer with no high risk factor $T_3N_0M_0$ and microsatellite stability, the single drug Capetabin is recommended for treatment. For patients with stage III bowel cancer, the guidelines recommend a combination of chemotherapy based on Ochary platinum. However, based on the results of the IEDA study for patients with stage III colorectal cancer, it is necessary to layer stage III bowel cancer, and a 3-month CapeOX solution is recommended for low-risk patients with $T_{3N1.}$[22]。 For the first chemotherapy start time, the 2019 Chinese Society of Clinical Oncology (CSCO) colorectal cancer diagnosis and treatment guidelines recommend, starting from 3 weeks after surgery, not recommended at the latest more than 8 weeks after surgery. For the current situation, patients can be advised to delay the start of assisted chemotherapy appropriately.

### Protection strategy for emergency surgical patients

Emergency surgery refers to the urgent condition, after the doctor assessed the need for the shortest possible time (within 6 h) surgery, otherwise there is a risk of life- surgery. For patients with colorectal cancer who need emergency surgery, according to the emergency procedure to treat patients, see Figure 2,the patients admitted in a special "emergency ward", separate management, excluding the possibility of new coronary pneumonia infection, as soon as possible transferred to the general ward, empty the "emergency ward" ready to receive new emergency patients. As far as possible to improve the patient's epidemiological history, it is necessary to improve the body temperature and chest CT imaging examination, patient examination through the "green channel", accompanied by the attending physician, as soon as possible to obtain imaging data. After epidemiological history, body temperature and chest CT screening without abnormality of patients to carry out surgery, surgery in accordance with the requirements of secondary protection, the operating room strictly implement the final disinfection process of infectious diseases. For the patient's epidemiological history unknown (patientcom, shock and perforation, such as confusion, can not obtain the epidemiological history), or abnormal temperature and chest imaging examination, the patient is equivalent to the treatment of new coronary infection cases, need to go into a separate isolation ward for treatment, after surgery please consult the new coronary pneumonia expert group, if necessary, nucleic acid testing.

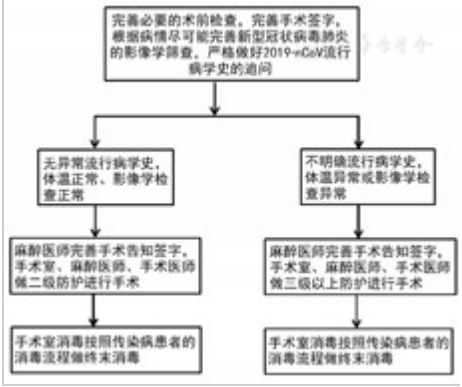


**Figure 2** Flow chart for patients in emergency surgery during the outbreak of new coronavirus pneumonia

### Ten, postoperative patient review strategy

For patients with routine review, if there is no abnormality in the body, it is recommended to postpone the review time appropriately, recommend not more than 1 month, or local hospital review, online consultation. If patients who must come to the hospital for re-diagnosis, it is recommended to communicate online with the competent doctor, make an appointment for a follow-up visit time, request only one family member to accompany them, the patient and the family wear masks, it is recommended to take a private car to see a doctor, reduce unnecessary exposure.

### Eleven, the protection strategy of medical personnel

Reducing exposure of medical staff is another focus of clinical work. For outpatients who wear disposable isolation clothing, goggles, disposable hats and medical surgical masks as required, the mask sits with a timely replacement of more than 4 h. Before and after contact with patients, you need to apply hand-free sanitizer, regular "seven-step hand washing" to wash hands. The clinic is disinfected with uv air at least once a day. Physicians who perform emergency visits and consultations wear goggles, disposable hats and medical surgical masks as required. Medical personnel who carry out normal medical treatment activities in wards need to wear disposable hats and medical surgical masks, strictly enforce hand hygiene, and need to be disinfected before and after contact with patients.

Strengthen measures to disinfect the environment in wards. (1) Nurse in charge: wipe the care platform, keyboard, mouse and other commonly used items with 500 mg/L of chlorine disinfectant every day. (2) Treatment nurse: daily treatment room, change room, dressing room, office UV disinfection; (3) The on-duty physician needs to wipe the medical record clip with chlorine-containing disinfectant, and return in time. (4) Health workers need to carry out daily bedside table, bed bar, caller, equipment belt and door handle, etc. for chlorine-containing disinfectant wipe. (5) Daily disinfection of chlorine-containing disinfectant on the ground. The wards need ventilation. (6) The nurse's treatment car is wiped daily with chlorine-containing disinfectant. (7) For wards that have fever or CT examination during emergency treatment discharge or in-patient wards, final disinfection is required.

Summary At present, the outbreak of new coronary pneumonia is sweeping the world, as the front-line medical workers shoulder important responsibilities and pressures, but through our strict management strategy, we can minimize the risk of infection exposure. In the special period, the treatment of colorectal cancer patients also has

many questions, the author through the research progress in recent years and the summary of the guidelines, for colorectal cancer patients to provide a new way of thinking, hope that the majority of patients can provide more choices, but also for you to provide a more timely treatment model. I hope that we can work together to overcome the difficulty of "new crown pneumonia" as soon as possible!

**Zhi Xie** thank you for the struggle in Wuhan first-line Hebei Medical University Fourth Hospital and Hebei Medical University Third Hospital, the "retrograde warrior", you rushed in front of the people of Hebei! Thanks to the medical workers who are struggling on the front line of Hubei, it is your selfless dedication that can bring more patients' well-being, you are children, you are also parents, thank you! Thanks to hubei medical workers who have been rushing in the first line of the epidemic in Hubei, you may be tired without a day's rest, you may not see family members, you may also have lost loved ones, but dry the tears, you have full energy, thank you!

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