



浙江中醫藥大學
ZHEJIANG CHINESE MEDICAL UNIVERSITY

新冠肺炎（COVID-19）

中医理论与临床探讨

Discussion on the Theory and Clinical
practice of traditional Chinese Medicine by
COVID-19

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中西醫對新冠肺炎的基本認識
Basic Understanding of COVID
-19 by Traditional Chinese and
Western Medicine

(一) 背景

I. Background

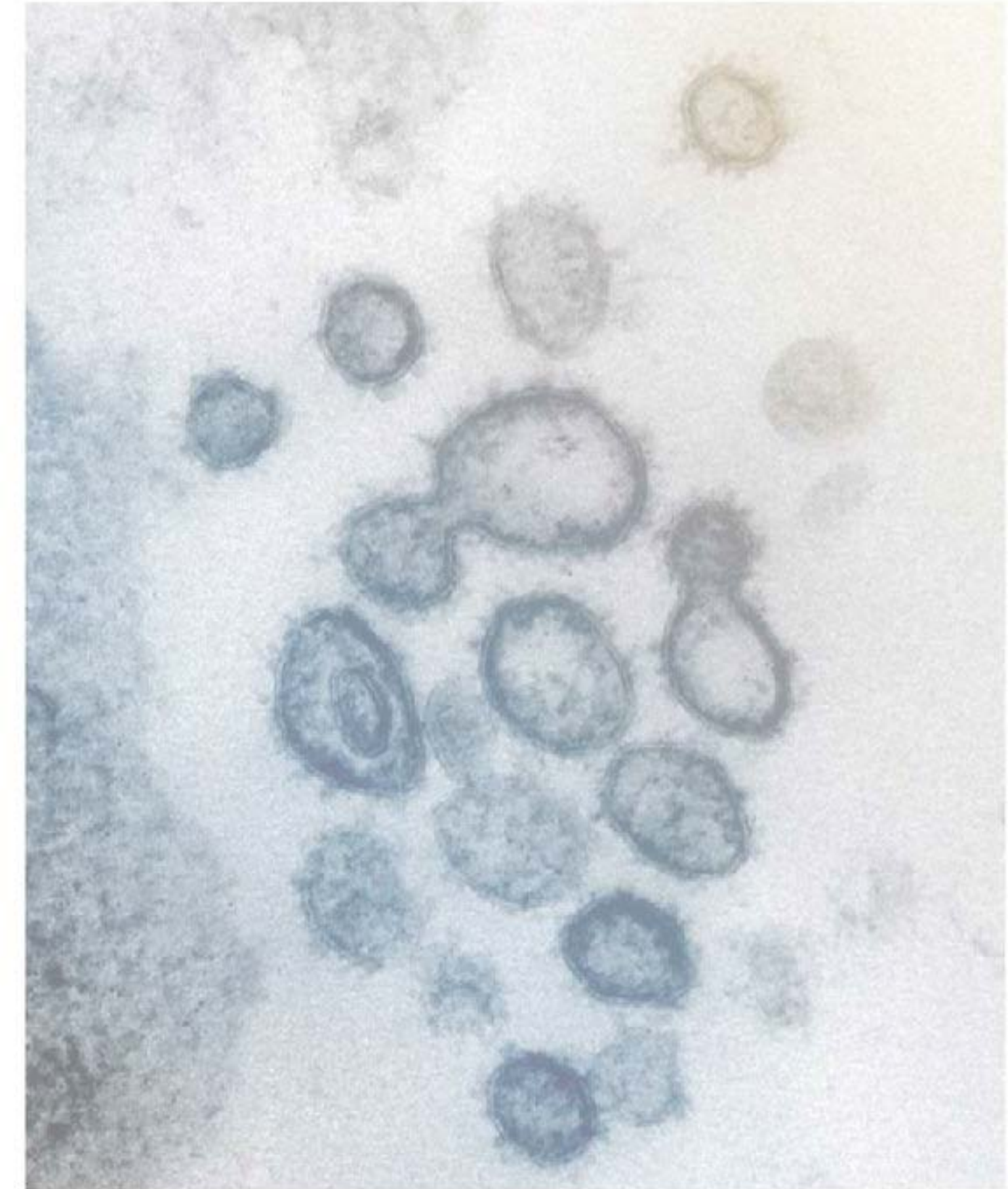
- 2019年12月以来，湖北省武汉市陆续发现了多例新型冠状病毒(SARS-CoV-2)感染的肺炎，称为新冠肺炎（COVID-19）。随着疫情的蔓延，我国其他地区及境外也相继发现了此类病例。现该病已被纳入《中华人民共和国传染病防治法》规定的乙类传染病，并采取甲类传染病的预防、控制措施^[1]。
- Since December 2019, a number of patients infected with the 2019 new coronavirus disease (COVID-19) have been detected in Wuhan, Hubei province. With the spread of the epidemic, such cases have been found in other parts of China and in abroad. The disease has been included in **class B infectious** diseases stipulated in the People's Republic China infectious disease prevention and cure statute, and **the prevention and control measures for class A infectious diseases have been taken.**



(一) 背景

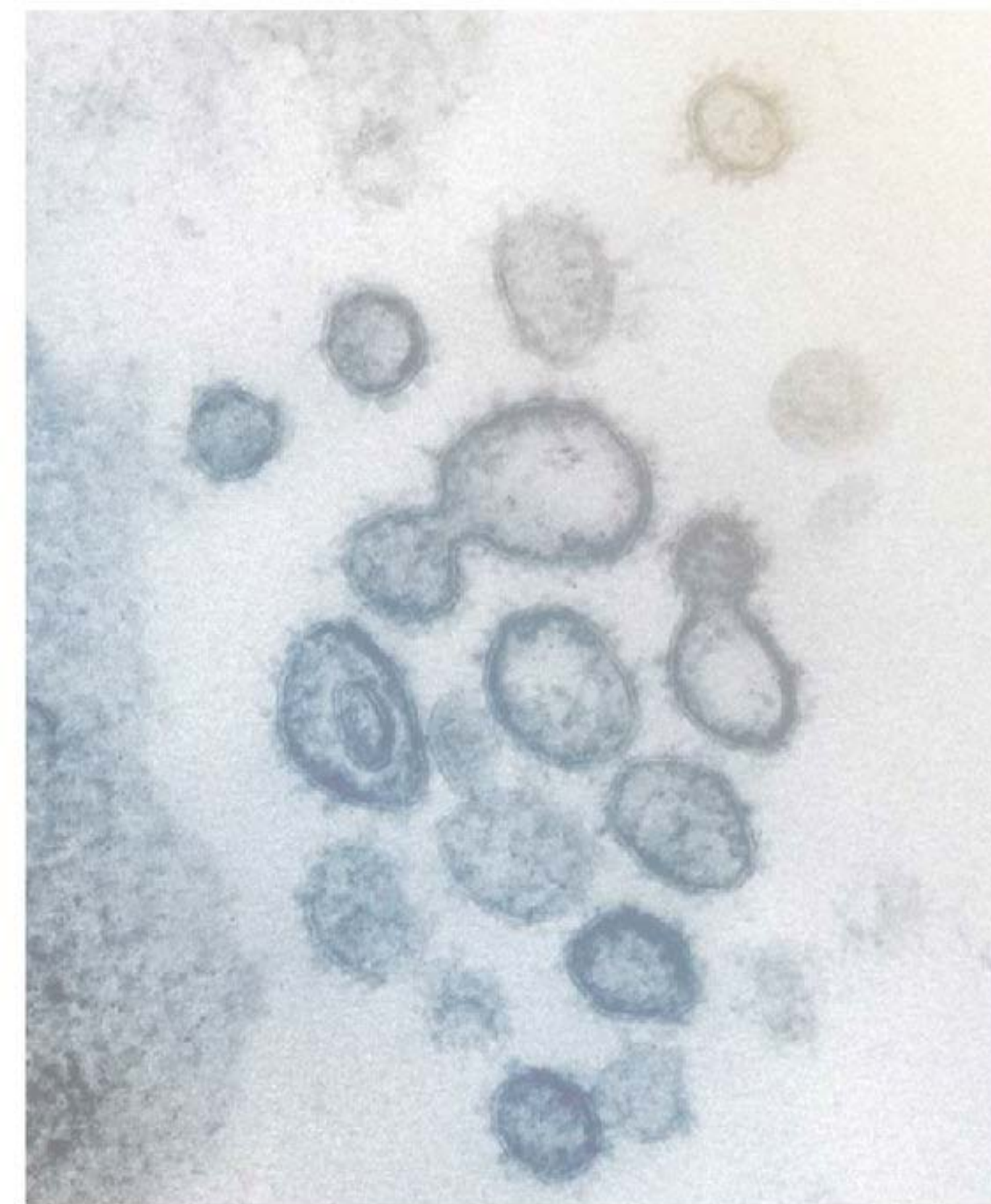
I. Background

- 冠状病毒是一大类病毒的统称，在历史上曾两次引起重大的呼吸道传染病——中东呼吸综合症(MERS)和严重急性呼吸综合症(SARS)。
- Coronaviruses are a group of viruses that have caused two major respiratory infections in history. Middle East respiratory syndrome (MERS) and severe acute respiratory syndrome (SARS).



(一) 背景 I. Background

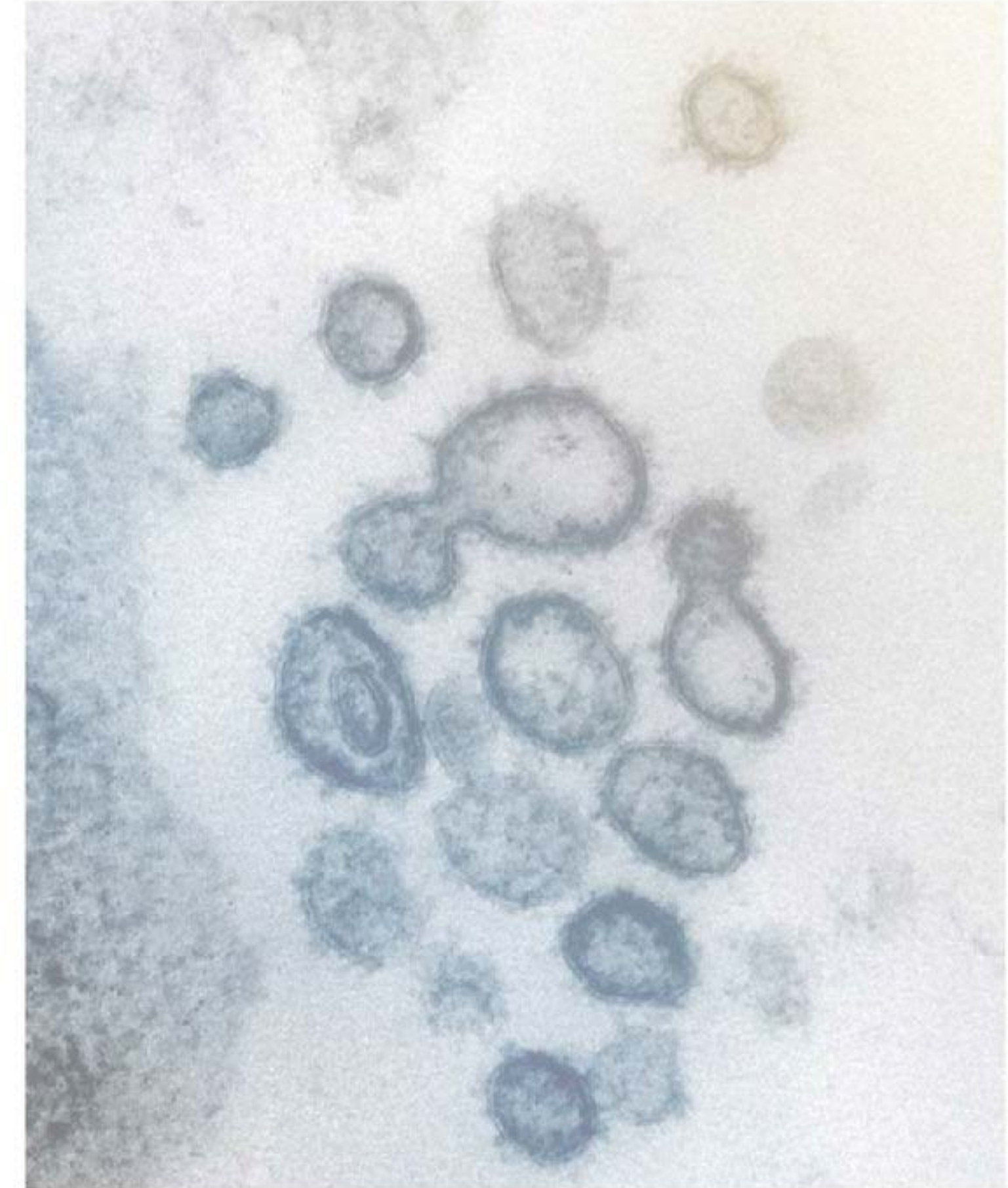
- 根据现有最新信息，世界卫生组织(World Health Organization, WHO)已确认，该病毒可在人际间传播。中国国家卫生健康委员会也已确认人际间传播情况的发生，且已有医护人员遭到感染^[2]，无症状携带者也可能会对他人形成传染。
- Based on the latest information available, the World Health Organization has confirmed that the virus can spread **from person to person**. The national health commission of China has also confirmed the occurrence of human-to-human transmission, and medical workers have been infected [2]. Asymptomatic carriers may also become infectious to others.



(一) 背景

I. Background

- WHO当前评估这一事件风险在中国为“**极高**”，在区域层级而言为“**高**”，在全球范围而言亦属于“**非常高**”。
- The WHO currently rates the risk as "**Extreme high**" in China, "high" at the regional level and "**very high**" globally.



(二) 流行病学 II. Epidemiology



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截至3月6日24时:

- 据31个省（自治区、直辖市）和新疆生产建设兵团报告，现有确诊病例22177例（其中重症病例5489例），累计治愈出院病例55404例，累计死亡病例3070例，累计报告确诊病例80651例，现有疑似病例502例。累计追踪到密切接触者672458人，尚在医学观察的密切接触者26730人。
- As of March 6 twelve p.m.: according to the 31 provinces (autonomous regions and municipalities directly under the central government) and the xinjiang production and construction corps. There are now 22177 confirmed cases (5489 patients with severe cases), the cumulative cured cases, the cumulative cured cases, 55404 cases of hospital, the cumulative death cases, 3070 cases, has reported 80651 cases of confirmed cases, the existing 502 cases suspected cases. A total of 672,458 close contacts were traced, and 26,730 close contacts were still under medical observation.

(二) 流行病学 II. Epidemiology



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在韩国、意大利、伊朗、日本、法国、西班牙、英国、新加坡、德国、意大利、美国等多个国家均已有发病，共累计确诊21285例，治愈1667，死亡416例。

In Korea, Italy, Iran, Japan, France, Spain, the United Kingdom, Singapore, Germany, Italy, the United States and other countries have been infected, a total of 21,285 cases were confirmed, 1667 cured, 416 deaths.

(二) 流行病学

II. Epidemiology



- **传染源:** 目前所见传染源主要是新型冠状病毒感染的肺炎患者，无症状患者也可能称为传染源。

(1) Infection sources

- At present, the main source of infection is patients infected with new coronavirus pneumonia . The asymptomatic infected person can also be a source of infection.

(二) 流行病学



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II. Epidemiology

- **传播途径:** 经呼吸道飞沫传播和密切接触传播是主要的传播途径。在相对封闭的环境中长时间暴露于高浓度气溶胶情况下中存在经气溶胶传播的可能。由于在粪便及尿中可分离到新型冠状病毒，应注意粪便及尿对环境污染造成气溶胶或接触传播。

(2) Routes of transmission

- Transrespiratory droplets and close contacts are the main routes of transmission, and there is a possibility of aerosol transmission in relatively closed environments with prolonged exposure to high concentrations of aerosols. Since the novel coronavirus can be isolated from feces and urine, attention should be paid to the aerosol or contact transmission caused by feces and urine to environmental pollution

(二) 流行病学



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II. Epidemiology

- **易感人群：**人群普遍易感。老年人及有基础疾病者感染后病情较重，儿童及婴幼儿也有发病。

(3) Susceptible groups

- The population is generally susceptible.

(三) 病因 III. Pathogenesis



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- 1、部分冠状病毒可导致人类患病（如普通感冒、SARS、MERS等），新型冠状病毒是一种 β 冠状病毒。
- 2、武汉暴发的COVID-19一部分与华南海鲜市场（售卖野生动物）有关，表明该病毒可能为人畜共患病起源。动物宿主目前尚不明确，有研究表明是蝙蝠冠状病毒与来源未知的冠状病毒所形成的重组病毒，可能来自于蛇、穿山甲等

1. Some novel coronavirus can lead to human diseases (such as common cold, SARS, MERS, etc.), and a new coronavirus is a beta coronavirus.

2. Part of the wuhan outbreak of covid-19 was associated with the south China seafood market (selling wild animals), suggesting that the virus may be of zoonotic origin. The animal host is not clear at present. Some studies indicate that it is a recombinant virus formed by the bat coronavirus and the coronavirus of unknown origin, which may come from snakes, pangolins, etc

(三) 病因 III. Pathogenesis



3. 根据柳叶刀杂志论文“Clinical features of patients infected with 2019 novel”，2019年12月1日出现的第一位有不明原因肺炎症状的武汉市民（后被确诊为COVID-19）并未有暴露于华南海鲜市场的经历；美国等国家也出现了无明确病原的病例、该病毒的完整基因组可在GenBank中获取

(序列网址为：https://www.ncbi.nlm.nih.gov/nuccore/NC_045512)

3. According to the Lancet paper "Clinical features of patients infected with 2019 novel", the first wuhan citizen with unexplained pneumonia (later diagnosed as COVID -19) who appeared on December 1, 2019 had no experience of exposure to the south China seafood market; The United States and other countries have also seen no clear pathogen cases; The complete genome of the virus can be obtained from GenBank

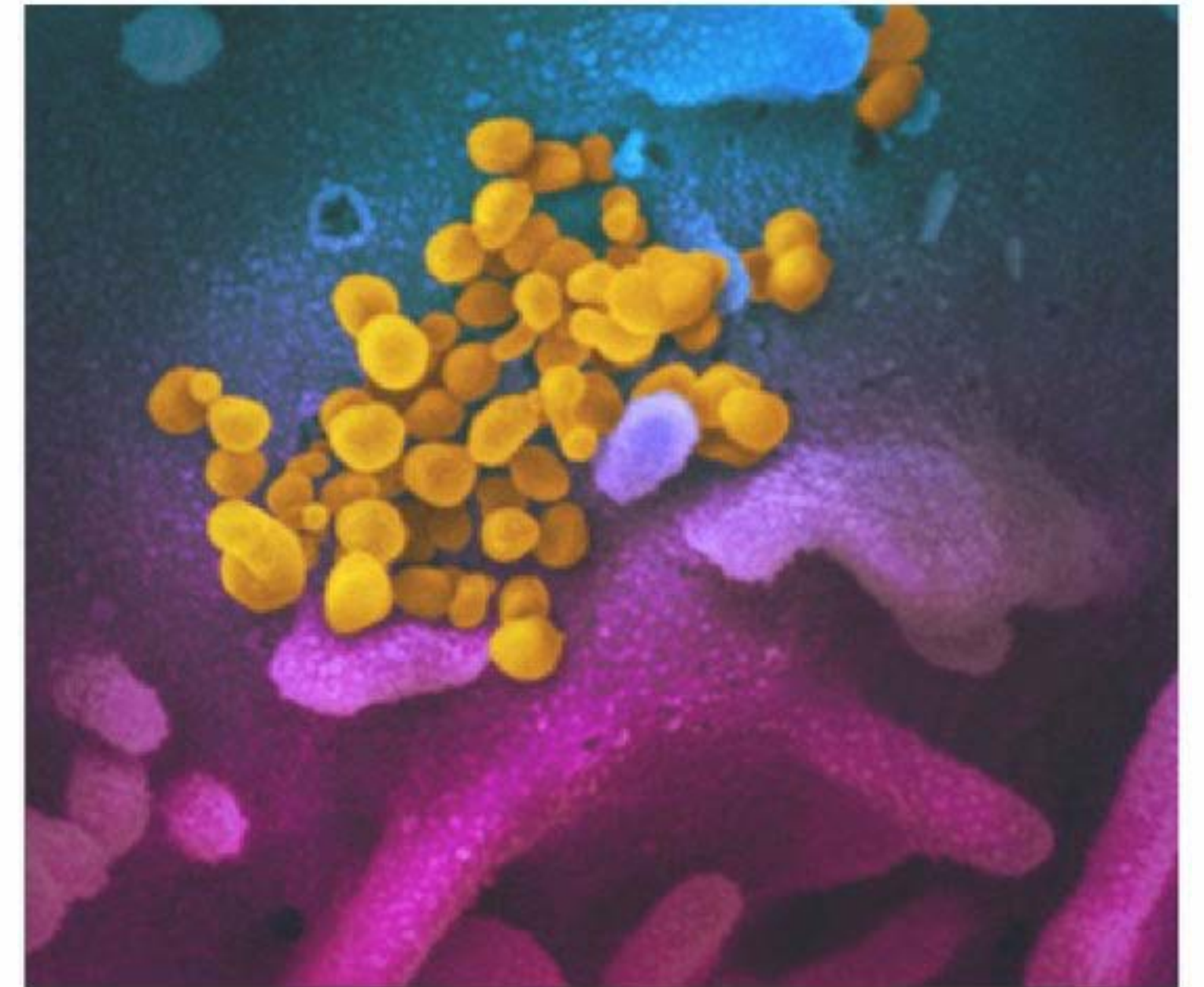
(https://www.ncbi.nlm.nih.gov/nuccore/NC_045512)

(四) 病原学特点

IV. Etiological Characteristics



- 新型冠状病毒属于 β 属的新型冠状病毒，有包膜，颗粒呈圆形或椭圆形，常为多形性，直径60-140nm，其基因特征与SARS-CoV和MERS-CoV有明显区别。与蝙蝠SARS样冠状病毒(bat-SL-CoVZC45)同源性达85%以上。
- The new coronavirus belongs to a new coronavirus of the β genus, with envelope and round or oval particles, which often characterized by pleomorphism, with a diameter of approximately 60-140 nm. Its genetic characteristics are significantly different from SARSr-CoV and MERSR-CoV. Current studies have shown more than 85% homology with bat-SARS-like coronavirus (bat-SL-CoVZC45).

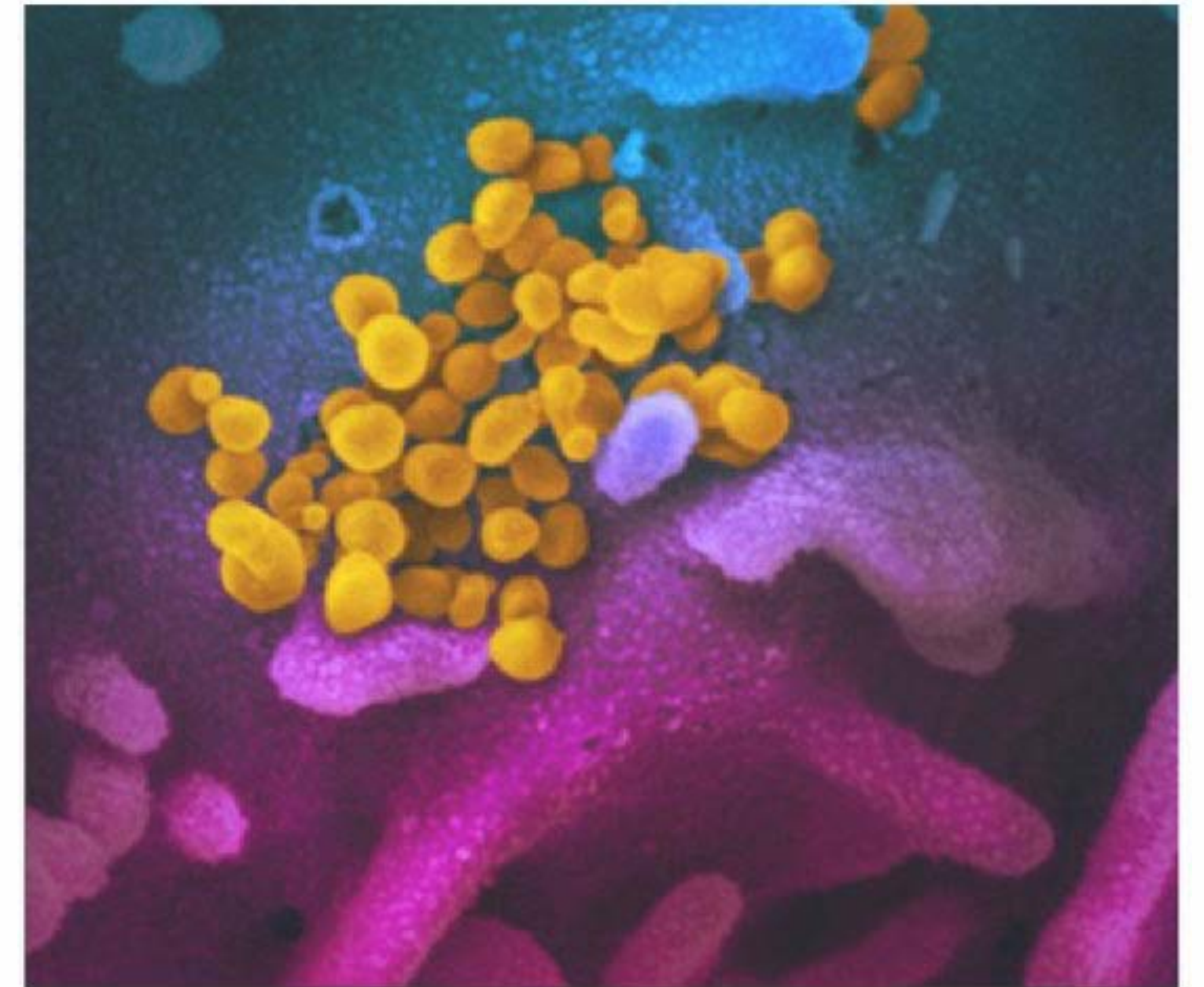


(四) 病原学特点

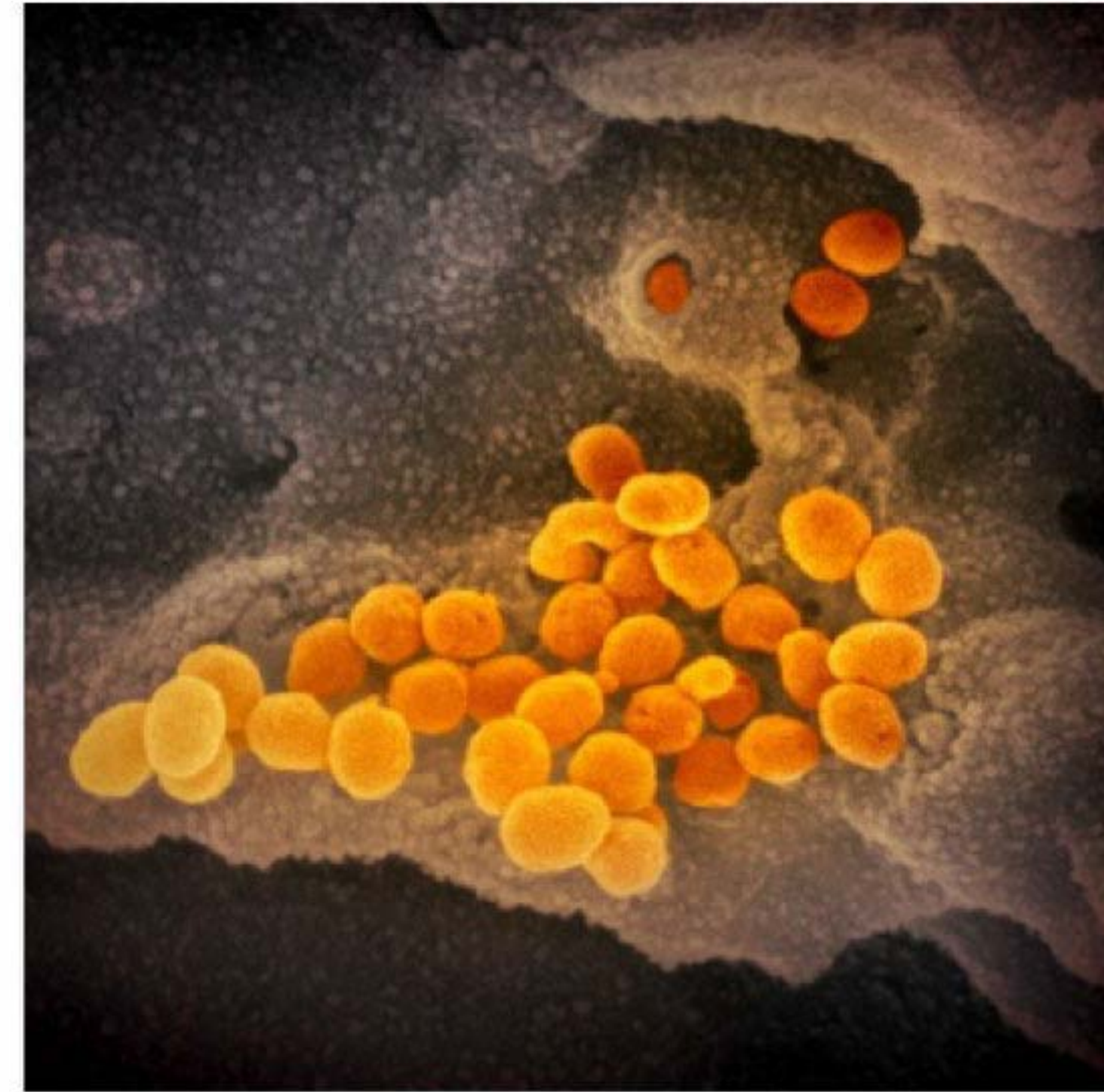
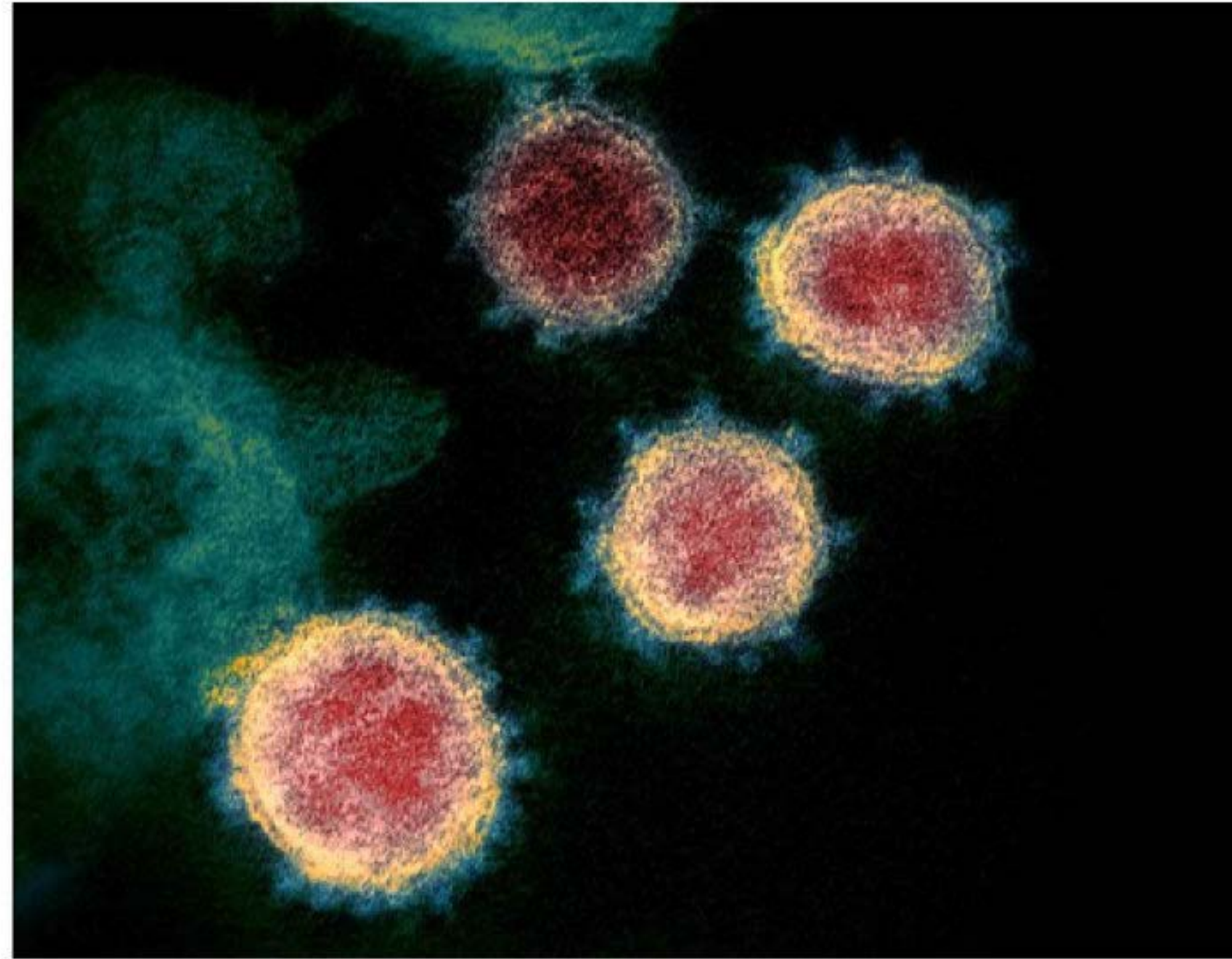
IV. Etiological Characteristics



- 体外分离培养新冠病毒时，96个小时左右即可在人呼吸道上皮细胞内发现，而在Vero E6和Huh-7细胞系中分离培养需约6天。
- 病毒对紫外线和热敏感，56°C 30分钟、乙醚、75%乙醇、含氯消毒剂、过氧乙酸和氯仿等脂溶剂均可有效灭活病毒。
- In vitro isolation and culture, 2019-nCoV can be found in human respiratory epithelial cells within 96 hours, while lines it takes about 6 days to isolate and culture in Vero E6 and Huh-7 cell .
- The virus is sensitive to ultraviolet mild and heat. The virus can be effectively inactivate at 56°C for 30 minutes or in lipid solvents such as 75% ethanol, chlorine-containing disinfectant, peracetic acid and chloroform, while chlorhexidine fail to inactivate the virus.



(四) 病原学特点



2月11日，美国国家过敏与传染病研究所（NIAID）落基山实验室（RML）在扫描和透射电子显微镜上拍摄到的新冠病毒图像。

This image of a new coronavirus is captured by a scanning and transmission electron microscope at the national institute of allergy and infectious diseases (NIAID) rocky mountain laboratory (RML) on Feb. 11.

(五) 病变累及系统与病理学改变



V. Systemic involvement and pathological changes

累及系统 Systemic involvement

- 新冠病毒主要感染呼吸系统，进而导致肺炎，严重者因肺功能衰竭而死亡。
- 危重患者还出现肝脏[1]、肾脏[2]、心脏[3]等多器官损害，甚至功能衰竭。
- The new coronavirus mainly infects the respiratory system, leading to pneumonia and, in severe cases, death from lung failure
- Critically ill patients also suffer from multiple organ damage, including liver [1], kidney [2], heart [3], and even functional failure.

[1]bioRxiv 2020.01.30.

[2]medRxiv 2020.02.08.

[3]Front. Med. [Epub ahead of print]



(五) 病变累及系统与病理学改变

V. Systemic involvement and pathological changes

- 统计发现，63%新冠肺炎出现蛋白尿，100%肾脏CT影像学异常。可能与肾脏ACE2蛋白表达量较高相关。
- Statistics showed that 63% of new crown pneumonia had proteinuria and 100% of renal CT imaging abnormalities. It may be related to the high expression of ACE2 protein in kidney

[1]bioRxiv 2020.01.30.

[2]medRxiv 2020.02.08.

[3]Front. Med. [Epub ahead of print]

(五) 病变累及系统与病理学改变

V. Systemic involvement and pathological changes

病理学改变，根据目前有限的尸检和穿刺组织病理观察结果总结如下。

Pathological changes are summarized as follows based on the present limited pathologic findings of autopsy and biopsy.

(一) **肺脏**: 肺脏呈不同程度的实变。肺泡腔内见浆液、纤维蛋白性渗出物及透明膜形成; 渗出细胞主要为单核和巨噬细胞, 易见多核巨细胞。II型肺泡上皮细胞显著增生, 部分细胞脱落。II型肺泡上皮细胞和巨噬细胞内可见包涵体。肺泡隔血管充血、水肿, 可见单核和淋巴细胞浸润及血管内透明血栓形成。

1. The lungs

The lungs show various degrees of consolidation. Serous fibrin exudate and hyaline membrane were seen in alveolar cavity. Exudate cells are mainly mononuclear and macrophage, and polynuclear giant cells are common to see. Type II alveolar epithelial cells proliferate markedly, with some cells exfoliated. Inclusion bodies are seen in type II alveolar epithelial cells and macrophages. The alveolar septa is congested and edematous. Mononuclear and lymphocyte infiltration and clear intravascular thrombosis are seen



(五) 病变累及系统与病理学改变

V. Systemic involvement and pathological changes

肺组织灶性出血、坏死，可出现出血性梗死。部分肺泡腔渗出物机化和肺间质纤维化。肺内支气管黏膜部分上皮脱落，腔内可见黏液及黏液栓形成。少数肺泡过度充气、肺泡隔断裂或囊腔形成。电镜下支气管黏膜上皮和II型肺泡上皮细胞胞质内可见冠状病毒颗粒。免疫组化染色显示部分肺泡上皮和巨噬细胞呈新型冠状病毒抗原阳性，RT-PCR检测新型冠状病毒核酸阳性。肺内大量的粘液及黏液栓形成，导致患者会出现呼吸困难，氧气不足。这提示了除了吸氧外，临床治疗上可能要提前预警，早插管、早期积极使用气管镜、俯卧位等手段促进痰液引流。

Focal hemorrhage and necrosis of lung tissue may occur with hemorrhagic infarction. Partial alveolar exudate is institutionalized and interstitial fibrosis occurs. Part of the epithelium of the bronchial mucosa in the lung has been detached. A few alveolar hyperinflation, alveolar septum rupture or cystic cavity formation. Coronavirus particles were seen in the cytoplasm of bronchial mucosal epithelium and type II alveolar epithelial cells under electron microscopy. Immunohistochemical staining showed that some alveolar epithelium and macrophages were positive for novel coronavirus antigen, and RT-PCR detected positive nucleic acid of 2019-nCoV.



(五) 病变累及系统与病理学改变

V. Systemic involvement and pathological changes

(二)脾脏、肺门淋巴结和骨髓。

脾脏明显缩小。淋巴细胞数量明显减少,灶性出血和坏死,脾脏内巨噬细胞增生并可见吞噬现象;淋巴结淋巴细胞数量较少,可见坏死。免疫组化染色显示脾脏和淋巴结内CD4+T和CD8+T细胞均减少。

骨髓三系细胞数量减少。

2.Spleen, hilar lymph nodes, and bone marrow

The spleen has shrunk markedly.The number of lymphocytes decreased significantly, with focal hemorrhage and cytolysis.Macrophages proliferate and phagocytosis can be seen in the spleen. Lymph node lymphocytes are few in number and necrosis can be seen.Immunohistochemical staining showed a decrease in CD4+T and CD8+T cells in the spleen and lymph nodes, and a decrease in the number of the three lines of bone marrow cells.

(五) 病变累及系统与病理学改变

V. Systemic involvement and pathological changes



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(三)心脏和血管。

心肌细胞可见变性、坏死,间质内可见少数单核细胞、淋巴细胞和(或)中性粒细胞浸润。部分血管内皮脱落、内膜炎症及血栓形成。

(四)肝脏和胆囊。

体积增大,暗红色。肝细胞变性、起性坏死伴中性粒细胞浸润;肝血窦充血,汇管区见淋巴细胞和单核细胞细胞浸润,微血栓形成。胆囊高度充盈。

3.Heart and blood vessels

The cardiomyocytes are denatured and necrotic, with a few monocytes, lymphocytes, and/or neutrophils infiltrating the stroma. Some of the vessels showed endothelial shedding, endometrial inflammation and thrombus formation.

4.Liver and gall bladder

The liver and gallbladder are enlarged and dark red. Degeneration, acute necrosis and infiltration of neutrophils can be seen in the hepatocytes. The hepatic sinus is hyperemic. The portal area displays lymphocytes and mononuclear cells, with microthrombus formation. And the gallbladder is highly filled

(五) 病变累及系统与病理学改变

V. Systemic involvement and pathological changes

(五)肾脏。

肾小球球囊腔内见蛋白性渗出物,肾小管上皮变性、脱落,可见透明管型。间质充血,可见微血栓和灶性纤维化。

(六)其他器官。

脑组织充血、水肿,部分神经元变性。肾上腺见灶性坏死。食管、胃和肠管黏膜上皮不同程度变性、坏死、脱落

5.Kidney

Proteinaceous exudate can be seen in the glomerular balloon lumen. Tubular epithelium is denatured and exfoliated.And there is interstitial hyperemia with microthrombus and focal fibrosis.

6.Other organs

The brain tissue presents as hyperemia, edema, and degeneration of some neurons.Focal necrosis of the adrenal gland can be seen.The mucosal epithelium of esophagus, stomach and intestine showed different degrees of degeneration, necrosis and detachment.



图1 右侧胸膜增厚,与右肺广泛粘连;图2 左肺灰白色斑片状病灶;图3 肺切面灰白色黏稠液体溢出,并可见纤维条索;图4 气管腔内见白色泡沫状黏液;图5 右肺支气管腔内见胶冻状黏液附着;图6 心包腔内见淡黄色清亮液体,右心耳充盈饱满;图7 心肌切面呈灰红色鱼肉状;图8 小肠节段性扩张与狭窄相间

Fig. 1 Right pleura thickening, extensive adhesion with the right lung; Fig. 2 Gray white patchy lesions in the left lung; Fig. 3 Gray white viscous fluid overflow in the lung section, and fiber bands can be seen; Fig. 4 White foam mucus in the trachea; Fig. 5 Gelatinous mucus attachment in the right lung bronchus; Fig. 6 Pale yellow clear liquid in the pericardial cavity and a full filling of the right atrial appendage; Fig. 7 The myocardial section is gray red fish like; Fig. 8 Segmental dilatation and stenosis of small intestine alternate

(六) 中医药在COVID-19诊治过程中的重要作用

The important role of traditional Chinese medicine in the diagnosis and treatment of COVID-19

- 与其他冠状病毒类似，COVID-19也被认为是一种**自限性疾病**，至今并无明确的特效药物。西医主要以支持治疗、对症治疗、积极防治基础性疾病和调节改善患者自身免疫功能为主。
- Like other coronaviruses, COVID-19 is also considered to be a self-limited disease, and there is no specific drug so far. Western medicine is mainly to support treatment, symptomatic treatment, active prevention and treatment of basic diseases and regulation to improve the autoimmune function of patients.
- 几千年来，中医药一直发挥着治疗与控制传染病的作用，对防治呼吸道疾病的成功经验丰富。
- For thousands of years, traditional Chinese medicine has been playing a role in the treatment and control of infectious diseases, and has rich experience in the prevention and treatment of respiratory diseases.

(六) 中医药在COVID-19诊治过程中的重要作用

The important role of traditional Chinese medicine in the diagnosis and treatment of COVID-19

- 中西医结合治疗的手段曾在防治“非典型肺炎”SARS过程中起到了重要的作用。以广东省中医院收治的103例SARS为例，出院96例(93.21%)，死亡7例(6.79%)，病死率远低于平均水平。
- The treatment of integrated traditional Chinese and western medicine has played an important role in the prevention and treatment of atypical pneumonia (SARS). Taking 103cases of SARS treated in Guangdong Hospital of traditional Chinese Medicine as an example, 96 cases (93.21%) were discharged and 7 cases (6.79%) died. The case fatality rate was much lower than the average.
- 现在，各地采用中医药治疗COVID-19，也都取得了不错的疗效。
- Now, the use of traditional Chinese medicine in the treatment of COVID-19, has also achieved good results.

中医药在COVID-19诊治过程中的作用受到国家的肯定



The role of traditional Chinese medicine in the diagnosis and treatment of COVID-19 is affirmed by the state.

- 1月22日国家卫健委《新型冠状病毒诊疗方案（试行第三版）》正式将中医药防治纳入方案。
- 2月6日，国家中管局发布了《中医药有效方剂筛选研究取得阶段性进展》，截至2月5日，4个试点省份运用清肺排毒汤救治确诊病例214例，3天为一个疗程，总有效率达90%以上，其中60%以上患者症状和影像学表现改善明显，30%患者症状平稳且无加重。
- 2月7日国家卫健委发文推荐在中西医结合救治新型冠状病毒感染的肺炎中使用“清肺排毒汤”。
- 2月12日国家卫健委发布了《防治工作中建立健全中西医协作机制的通知》，肯定了中医在共同防控新冠肺炎疫情防控和医疗救治中取得的较好成效，并认为进一步制定和完善中西医结合诊疗方案。



(七) 中医病因 TCM Etiology

1. 感受疫戾之气：疫疠之气为一种特殊的致病物质，非一般所指的风、寒、暑、湿、燥、火等六淫之邪。 Infection of epidemic pathogenic factors : Epidemic pathogenic factors are special pathogenic substance, which are not commonly referred to six evil factors as wind, cold, summer, dampness, dryness, fire.

(七) 中医病因 TCM Etiology



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2. 正气御邪不足：“正气存内，邪不可干”，疫病流行之际，有人发病，有人不发病，主要取决于体质和正气的强弱。吴又可指出“本气充满，邪不易入，本气适逢亏欠，呼吸之间外邪因而乘之”，“正气稍衰者，触之即病。”

Deficiency of resist evil by vital qi : “Pathogenic qi cannot invade the body if vital qi remains strong”, At the time of blight epidemic, some people get sick and some people don't, which mainly depends on the strength of constitution and vital qi. Wu Youke pointed out that “Vital qi is full, diseases and evils are not easy to infect, but righteousness is deficient, external evils can infect the human body between breathing.” “people who are weak in vital qi will get sick when they touch external evils .”



(七) 中医病位 TCM Disease Location

主要在肺：中医认为“肺为娇脏”

Mainly in the lung : TCM believes that “*The lung is a delicate organ*”.

生理上，肺脏清虚而娇嫩，吸之则满，呼之则虚，为脏腑之华盖，百脉之所朝会”；

病理上，外感六淫之邪从皮毛或口鼻而入，常易犯肺而为病。

因此，无论外感病变，病及于肺，则见发热、咳嗽、气喘，严重者可出现咯血及呼吸困难等病症。疫邪从口鼻进入，呼吸道传染，肺为呼吸出入之门户，秽浊之气由口鼻吸受，必然先伤肺气。

Physiologically, the lung is clear and delicate, full when inhaling and empty when exhaling, “the lung is the canopy of the viscera; all the blood vessels are governed by the lung” Pathologically, six evil factors enter from the skin or mouth and nose, and are often prone to lung disease.

Therefore, no matter the type of evil qi, as long as the disease is in the lung, fever, cough and asthma can be seen. In severe cases, diseases such as hemoptysis and dyspnea can occur. The pestilence enters from the mouth and nose which causes the respiratory tract infection, and the lung is the gateway to breathing in and out so that the lung qi will be hurt first Inevitably. 叶天士曰：“温邪上受，首先犯肺，逆传心包” *Ye Tianshi said, “if you suffer from warming evil, you will first invade the lungs and reverse the pericardium.”*

(七) 中医病位 TCM Disease Location



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脾：咳嗽声低，气短而喘，腹胀，便溏，舌体胖大，舌苔厚腻，甚至腐苔，脉弱等证候，表现出明显的**脾肺两虚、湿毒内陷**的证候。仝小林院士也提出，新型冠状病毒感染的肺炎**病位在脾**，治疗时注重调理脾胃。

Spleen: Cough and wheezing with low sound, abdominal distension and diarrhea, corpulent tongue, thick and greasy tongue coating, even rotten tongue coating, pulse weakness and so on, showing obvious deficiency of both lung and spleen, damp toxins invagination syndrome. Academician Tong Xiaolin also pointed out that COVID-19 is located in the lung and spleen, and attention should be paid to the recuperation of the spleen and stomach during treatment.

脾主四肢，水谷清阳之气由脾气输布，充养四肢。四肢肌肉的功能活动，与脾有密切关系。脾病则四肢肌肉功能障碍，疲乏无力。脾肺两虚则运化失职，水湿停聚，此时若感受寒湿疫毒，疫毒进一步损伤脾肺，正气虚衰，不能驱邪外出，

(7) 中医病位 TCM Disease Location



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《温病条辨·上焦》11条自注：“化源绝，乃温病第一死法也……按温病死状百端，大纲不越五条。在上焦有二：一曰肺之化源绝者死……”其人平素肺气、肺阴亏虚，感受疫毒邪气，则易有化源绝之虞。

Article 11 of *Item Differentiation of Warm Febrile Diseases ·Shangjiao* Annotation that: “The source of qi and blood is gone, and it is the biggest cause of death from febrile disease... There are many ways to die of febrile diseases, with no more than five outlines. There are two in Shangjiao: one is that people who are cut off from the source of qi and blood production in the lungs will die...” If the human body is usually deficient in lung qi and lung yin and feels the evil qi of epidemic poison, it is easy to have the danger of cutting off the source of qi and blood generation.

(七) 中医病位 TCM Disease Location



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肾：临床上老年人往往感染后病情较重，可能与其“**肾精亏虚**”的生理特点相关。同时，温病理论有“**邪伏少阴**”学说，“邪伏”即致病因素潜伏在体内；“少阴”，即指肾。

- 宋·喻嘉言提出温病三纲鼎立学说：“冬不藏精”者，邪气伏于少阴。邪气潜伏在人体内是否发病，除了和邪气要达到一定的量以外，还和人体的御邪能力相关。
- 温病大家柳宝诒《温热逢源》提出：“寒邪之内伏者，必因肾气之虚而入，故其伏也，每在少阴。”“即如伏气发温之病，惟冬伤于寒故病温，惟冬不藏精故受寒。其所受之寒，无不伏于少阴……其肾气未至大虚者，倘能鼓邪外达，则由少阴而达太阳，病势浅而轻。若肾虚不能托邪，则伏于脏而不得外出，病即深而重。”老年人等肾精亏虚者，当冬季寒邪最盛之时，新冠病毒等疫疠之邪更易于潜伏体内，在此期间，疫疠之气进而伤及正气，或正气难以抵抗疫疠之气，则疾病发生。



(七) 中医病位 TCM Disease Location

- 中医学有“**肺肾相生**”学说。肺司呼吸，肾主纳气。人体的呼吸运动，虽然由肺所主，但需要肾的纳气作用来协助。肺肾相互配合，共同完成呼吸的生理活动。所以说“肺为气之主，肾为气之根”。因此，疫疠之气日久也可经过肺之肃降，而下纳于肾。肺肾阴液之间也是相互资生的。
- 肺属金，肾属水，金能生水，肺阴充足，输精于肾，使肾阴充盛，保证肾的功能旺盛。水能润金，肾阴为一身阴液之根本，肾精充足，循经而上润于肺，保证肺气清宁，宣降正常。故《医医偶录》指出：“肺气之衰旺，全恃肾水充足，不使虚火炼金，则长保清宁之体。”
- 疫疠之气为阳邪，伏藏或储藏于肾，直接损伤肾阴，或肺阴损伤日久耗伤肾阴，都可以加剧肾精亏虚，进一步导致肺肾阴亏，这种情况下的肾虚者**COVID-19**往往起病较重，发展迅速，出现气喘、呼吸急促、潮热盗汗等症状。

(八) 中医病机

Pathogenesis of traditional Chinese medicine



根据新型冠状病毒感染性肺炎的发病表现，其基本病机可概括为：疫毒外侵，肺经受邪，正气亏虚。基本病机特点为湿、热、毒、虚、瘀。

According to the manifestation of COVID-19, its basic pathogenesis can be summarized as follows: external invasion of exogenous pathogenic factors, lung meridian suffering from evil, deficiency of vital qi. The basic pathogenesis is characterized by dampness, heat, poison, deficiency and blood stasis.

- 湿，其致病既可外感，亦可内生，亦可因干预过程而助湿，湿邪易阻遏气机，导致其升降失常，可见胸闷脘痞，便溏腹泻苔厚腻等症。
- **Dampness** can cause both exogenous and endogenous diseases, and it can also help dampness as a result of intervention. Dampness is easy to suppress qi, resulting in abnormal rise and fall, such as chest tightness, epigastric fullness, loose stools, diarrhea, thick and greasy tongue, and so on.

(八) 中医病机

Pathogenesis of traditional Chinese medicine



- **热**, 是指新型冠状病毒感染性肺炎在发病和发展过程中以发热为主要特征, 具有温热病性质, 同时在发病过程中有热邪燔灼呈阳热之象及热性升散易于耗气伤津的病理表现。
- **Heat** means that COVID-19 is characterized by fever in the process of onset and development, and has the nature of febrile disease. At the same time, in the course of the disease, there are the pathological manifestations of "heat evil burns, showing the image of yang heat" and "heat rising and dispersing, easy to consume gas and injure fluid".
- **毒**, 一方面是疫毒, 为一种特殊的致病物质形成的致病因子, 毒随邪入, 发病急骤, 传受迅速, 极易导致喘促厥脱; 一方面邪盛酿毒, 浸淫脏腑, 使之功能严重失调, 甚则发生实质损害, 内外毒邪互为交炽, 影响病情的发展与转归。
- **Poison** is an epidemic toxin, which is a special pathogenic factor for the formation of pathogenic substances. Poison enters with evil, occurs rapidly, and spreads quickly, which can easily lead to asthma and convulsion. In addition, evil breeds poison, soaks the viscera, making it seriously dysfunctional, even causing substantial damage; internal and external toxins are incandescent with each other, affecting the development and outcome of the disease.



(八) 中医病机

Pathogenesis of traditional Chinese medicine

- 虚，为正气虚，发病之初即有正气虚，《内经》言“盖无虚，故邪不能独伤人”，发病之后，正气尚盛，转归较好，反之则差，从新型冠状病毒感染性肺炎死亡病例看，以久病或年老之体为多；另一方面，病邪内羁，气血津液受耗，容易致虚。
- Deficiency means the deficiency of vital qi. At the beginning of the disease, there is deficiency of vital qi. The Yellow Emperor's Internal Classic says, "If there is no deficiency, evil qi cannot harm the human body alone." After the onset of the disease, vital qi is still prosperous, the prognosis is better, on the contrary, the death cases from COVID-19 are mainly long-term illness or old age. On the other hand, if the disease stays in the human body, the qi, blood and body fluid will be consumed, which can easily lead to deficiency.
- 瘀是疫毒蕴结，血热煎熬成瘀，王清任说“血受烧炼，其血必凝”(《医林改错》)，何廉臣也言“清火兼通瘀者，因伏火郁蒸血液，血被煎熬而成瘀”(《重订广温热论》)；同时邪热灼伤阴液，阴液不足即可造成血液浓缩而运行迟滞成瘀，正如周学海说“津液为火灼竭，则血行愈滞”。新型冠状病毒感染性肺炎过程中表现的微循环障碍及肺间质性病变等皆为瘀的表现。
- **Blood stasis** is the accumulation of epidemic toxin and blood-heat suffering into blood stasis. Wang Qingren said, "if the blood is burned, its blood will coagulate." He Lianchen also said, "those who clear fire and dredge blood stasis become blood stasis because of the stagnation of blood due to the stagnation of fire." At the same time, evil heat burns Yin fluid, Yin fluid deficiency, which can cause blood concentration and stagnation into blood stasis. As Zhou Xuehai said, "if the body fluid is burned out, the blood will stagnate more and more." The disturbance of microcirculation and pulmonary interstitial lesions in the process of COVID-19 are all manifestations of blood stasis.



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新冠肺炎的临床表现及诊断标准

Clinical manifestation and
diagnostic criteria of COVID-19



(一) 临床特点

I. Clinical characteristics

1、基于目前的流行病学调查，潜伏期1-14天，多为3-7天。

The incubation period of COVID-19 is approximately 1-14 days, with the majority being 3-7 days.

2、以**发热、乏力、干咳**为主要表现。少数患者伴有鼻塞、流涕、腹泻等症状。重型病例多在一周后出现呼吸困难和/或低氧血症，严重者快速进展为急性呼吸窘迫综合征、脓毒症休克、难以纠正的代谢性酸中毒和出凝血功能障碍及多器官功能衰竭等。

The main clinical manifestations are fever, fatigue, dry cough, a few patients with nasal congestion, runny nose, pharyngeal pain, myalgia and diarrhea symptoms.

(一) 临床特点

I. Clinical characteristics



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3、值得注意的是**重型、危重型患者**病程中可为中低热，甚至无明显发热。轻型患者仅表现为低热、轻微乏力等，无肺炎表现。

It is worth noting that patients with severe or critical illness may have moderate or low fever, or even no significant fever.

4、从目前收治的病例情况看，孕产妇临床过程与同龄患者接近，儿童病例症状相对较轻，少数患者病情危重，死亡病例多见于老年人和有慢性基础疾病者。

From the current case situation, most patients have a good prognosis, a few patients are in critical condition. The elderly and those with chronic underlying diseases have poor prognosis.

5、部分儿童及新生儿病例症状可不典型，表现为呕吐、腹泻等消化道症状或仅表现为精神弱、呼吸急促。

Cases in children have been relatively mild.

(一) 临床特点

I. Clinical characteristics



对首批收治入院的41例新型冠状病毒感染确诊患者进行前瞻性分析发现

- 感染者以男性居多(73%), 中位年龄为49岁。最常见症状为发热(98%)、咳嗽(76%)以及肌痛或乏力(44%)。次常见症状包括痰液生成(28%)、头痛(8%)、咯血(5%)和腹泻(3%)。
- 有55%的患者出现呼吸困难(症状发作后中位时间为8天), 63%的患者出现淋巴细胞减少。
- 所有患者均在胸部CT检查中发现肺炎异常表现(双侧毛玻璃样混浊或实变)。
- 并发症包括急性呼吸窘迫综合征、急性心肌损伤和继发感染。
- 不过, 很少有新型冠状病毒感染患者表现有显著的上呼吸道症状(如大量流涕、打喷嚏、咽痛)或胃肠道症状(如腹泻等)。



(二) 实验室检查 Laboratory Examination

(1)发病早期外周血白细胞总数正常或减低，淋巴细胞计数减少，部分患者出现肝酶、乳酸脱氢酶(LDH)、肌酶和肌红蛋白增高，部分危重者可见肌钙蛋白增高。

In the early stage of onset, the total number of leukocytes in peripheral blood is normal or decreased, and the lymphocyte count was reduced. In some of the patients , the liver enzyme, lactate dehydrogenase, myoenzyme and myoglobin are elevated. Elevated troponin can be seen in some critical patients.

(2)多数患者C反应蛋白(CRP)和血沉升高，降钙素原正常。

C-reactive protein (CRP) and erythrocyte sedimentation rate in most patients were elevated, and procalcitonin was normal.

(3)严重者D-二聚体升高、外周血淋巴细胞进行性减少。

In severe cases, D-dimer increased and peripheral blood lymphocytes progressively decreased.



(二) 實驗室檢查

Laboratory Examination

(4) 在鼻咽拭子、痰和其他下呼吸道分泌物、血液、糞便、尿液等標本中可檢測出新型冠狀病毒核酸。

The nucleic acids of SARS-CoV-2 can be detected in nasopharyngeal swabs, sputum and other lower respiratory secretions, blood, feces and other specimens.

(5) 病原學檢測：採用RT-PCR或/和NGS方法進行核酸檢測，檢測下呼吸道標本（痰或氣道抽取物）更加準確。

(6) 血清學檢測：新型冠狀病毒特异性IgM抗体多在发病3-5天后阳性，IgG抗体滴度恢复期较急性期有4倍及以上增高。



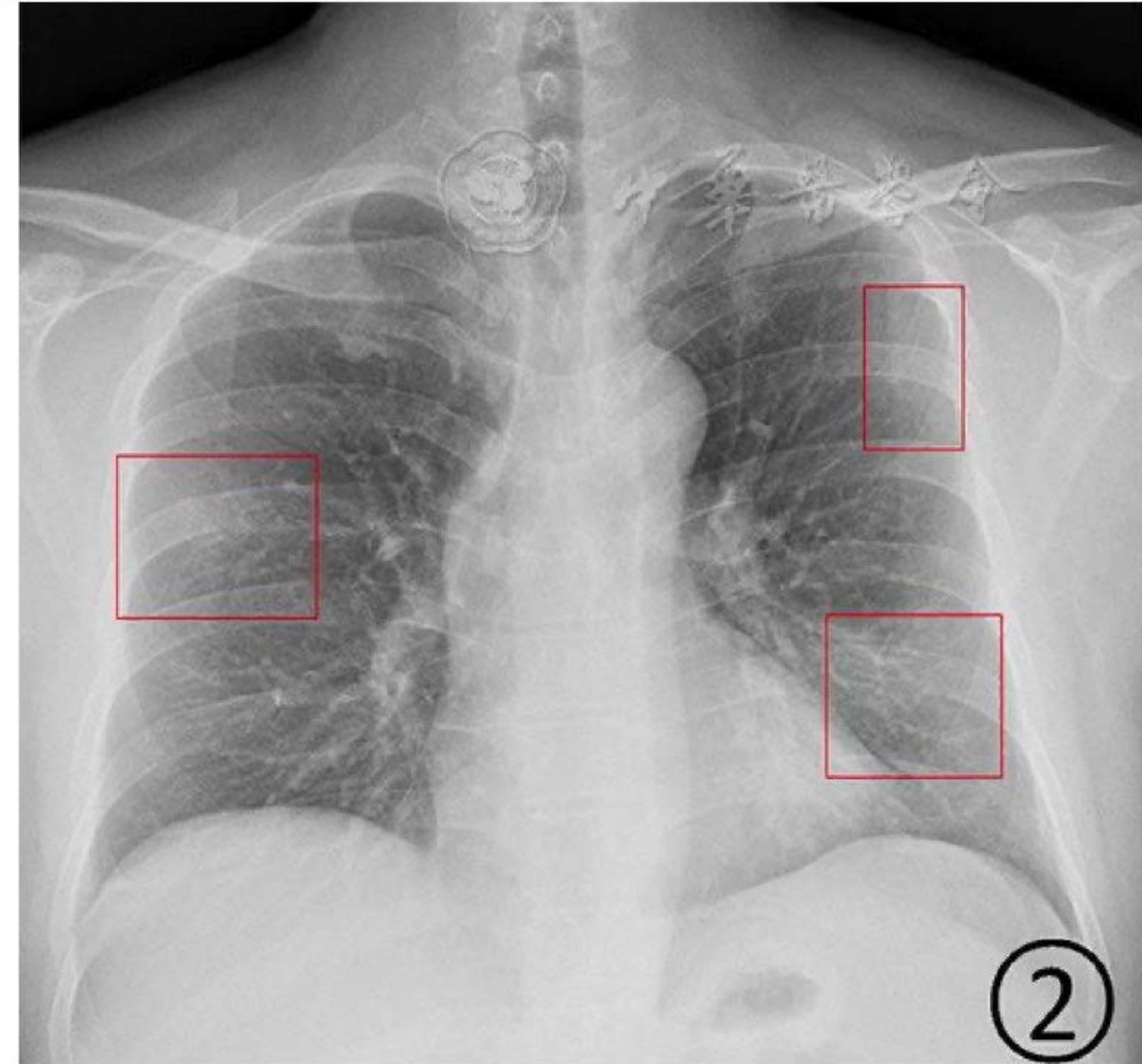
(三) 影像学表现-DR检查 Imaging findings-DR

核酸检测阳性的普通型患者:

两肺中外带和胸膜下的局限性斑片状或多发节段性片状阴影为主(图2)。

Ordinary patients with positive nucleic acid test:

Localized patchy or multiple segmental patchy shadows were mainly found in the outer and outer bands of both lungs and under the pleura (figure 2).



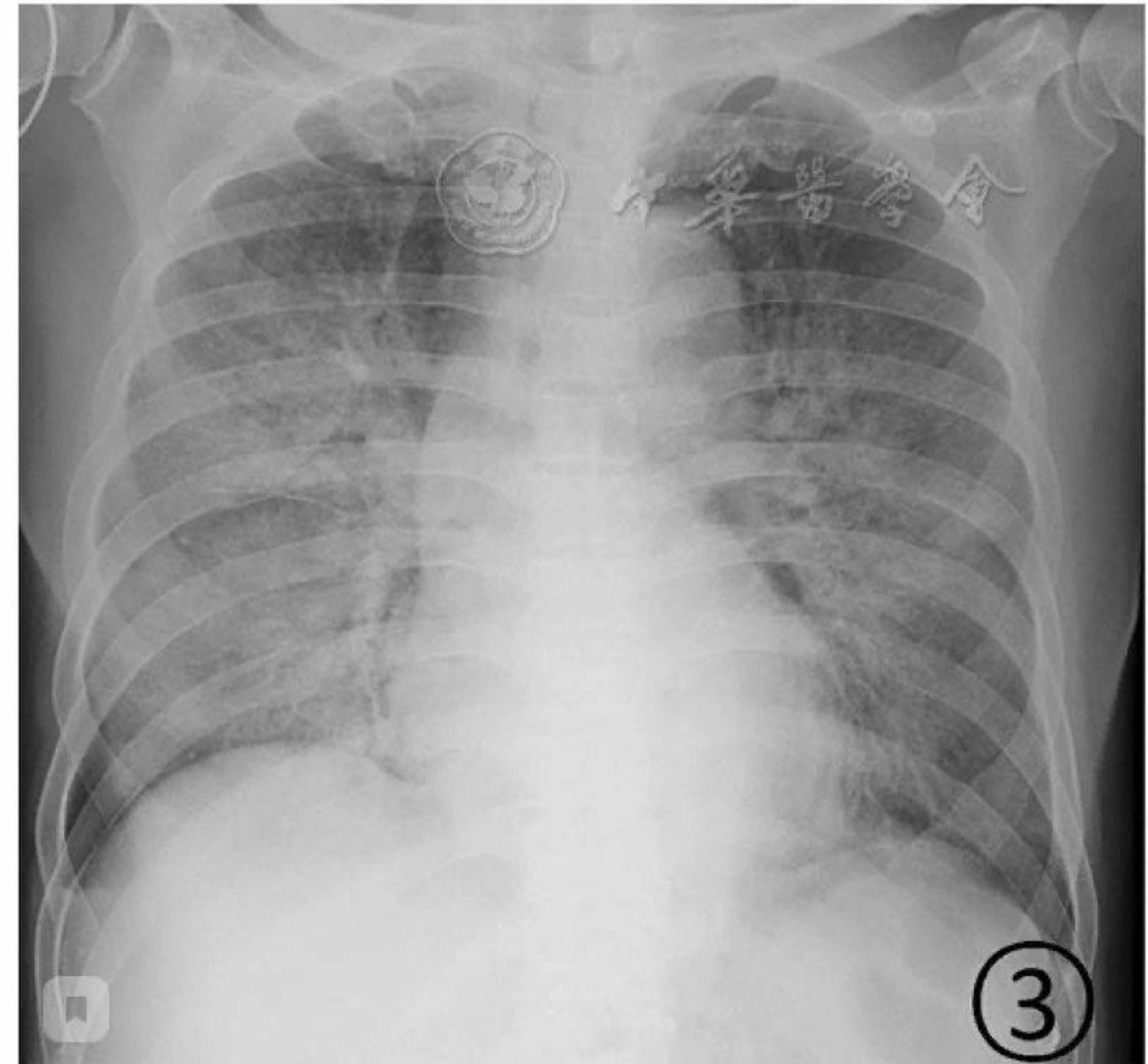
(三) 影像学表现-DR检查 Imaging findings-DR

重型患者:

双肺多发实变影，部分融合成大片状实变，可有少量胸腔积液（图3）。

Severe patients:

There are multiple consolidation in both lungs, some of which are fused into large consolidation, and there may be a small amount of pleural effusion (figure 3).



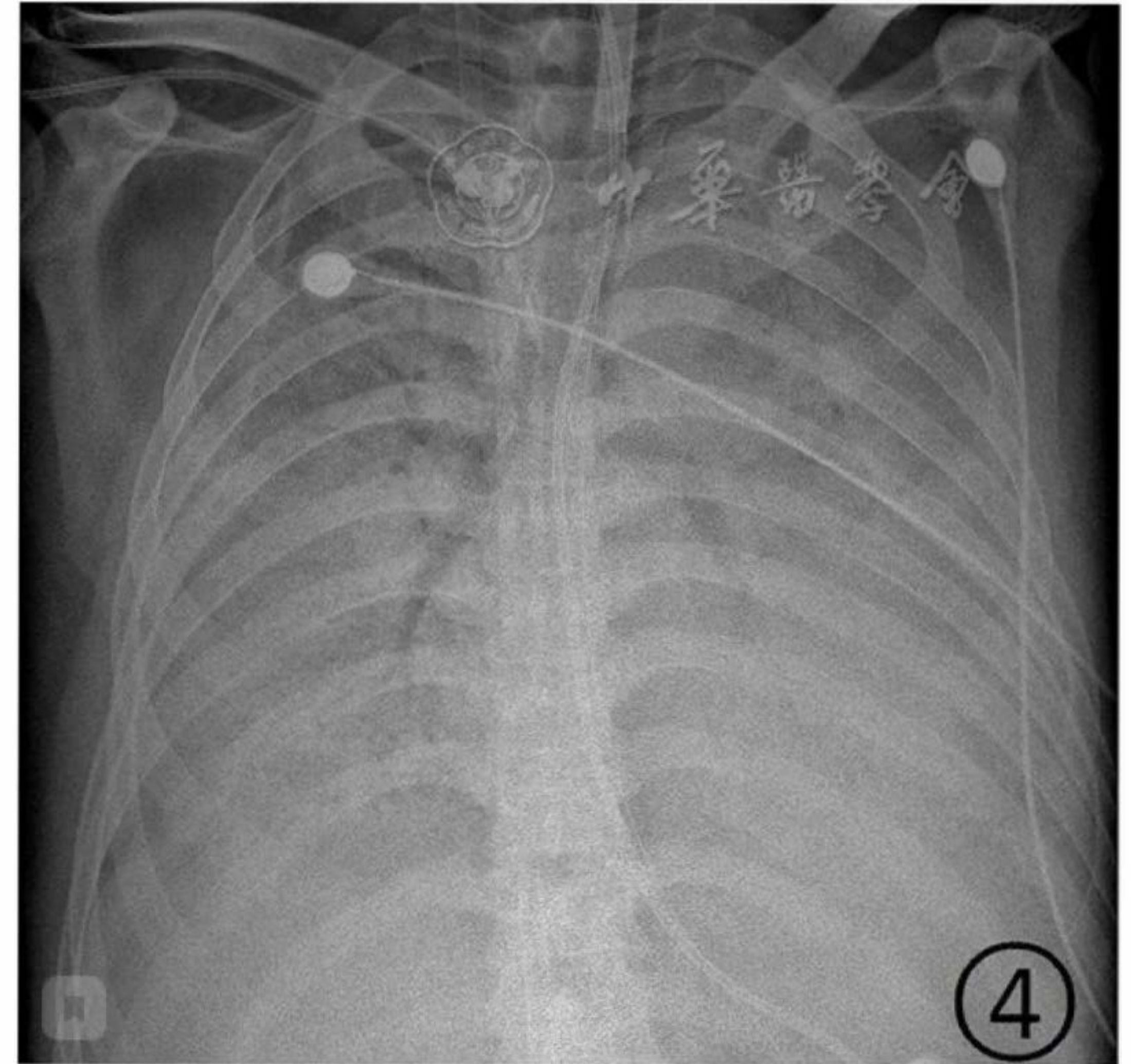
(三) 影像学表现-DR检查 Imaging findings-DR

危重型患者:

表现为两肺弥漫性实变阴影，呈“白肺”表现，临床上则有严重的低血氧症（图4），可以伴有少量胸腔积液。

Critically ill patients:

The manifestation is diffuse consolidation shadow in both lungs, showing a "white lung" manifestation, while clinically there is severe hypoxemia (figure 4), which can be accompanied by a small amount of pleural effusion.



(三) 影像学表现-CT

Imaging findings-CT

- 极少数普通型患者起病早期CT无异常发现，随着病变发展肺内可以出现病变。
- 常见CT表现为两肺有**多发斑片状磨玻璃阴影**、实变影，多沿支气管血管束和胸膜下分布为主，其间可见增粗的血管影，表现为细网格状影，呈“**铺路石征**”。也可以表现为极为淡薄的磨玻璃阴影，小血管周围有局限性磨玻璃阴影。
- 病变进展期肺内则表现为**磨玻璃阴影、实变、结节等多种性质病变共存**，以肺中外带和胸膜下、肺底分布为主，可有纤维化病灶存在。实变阴影内常见空气支气管征、细支气管管壁有增厚，纤维化病灶则表现为局部肺纹理增粗、扭曲，其内支气管管壁呈柱状，邻近胸膜或叶间胸膜增厚，有少量胸腔积液，无明显淋巴结肿大。
- In the early stage, there are multiple small patches and interstitial changes, which are obvious in the extrapulmonary zone. Then multiple ground-glass shadows and infiltration shadows can be seen in both lungs. In severe cases, pulmonary consolidation may occur. However, pleural effusion is rare.

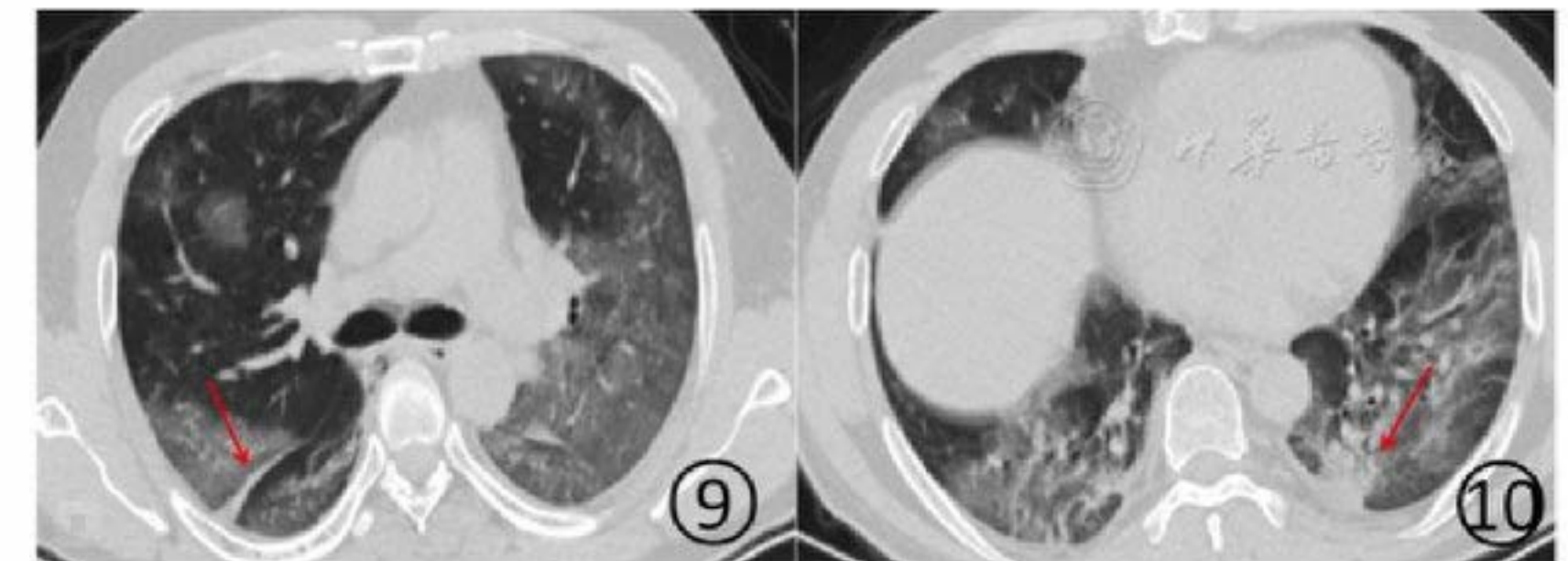
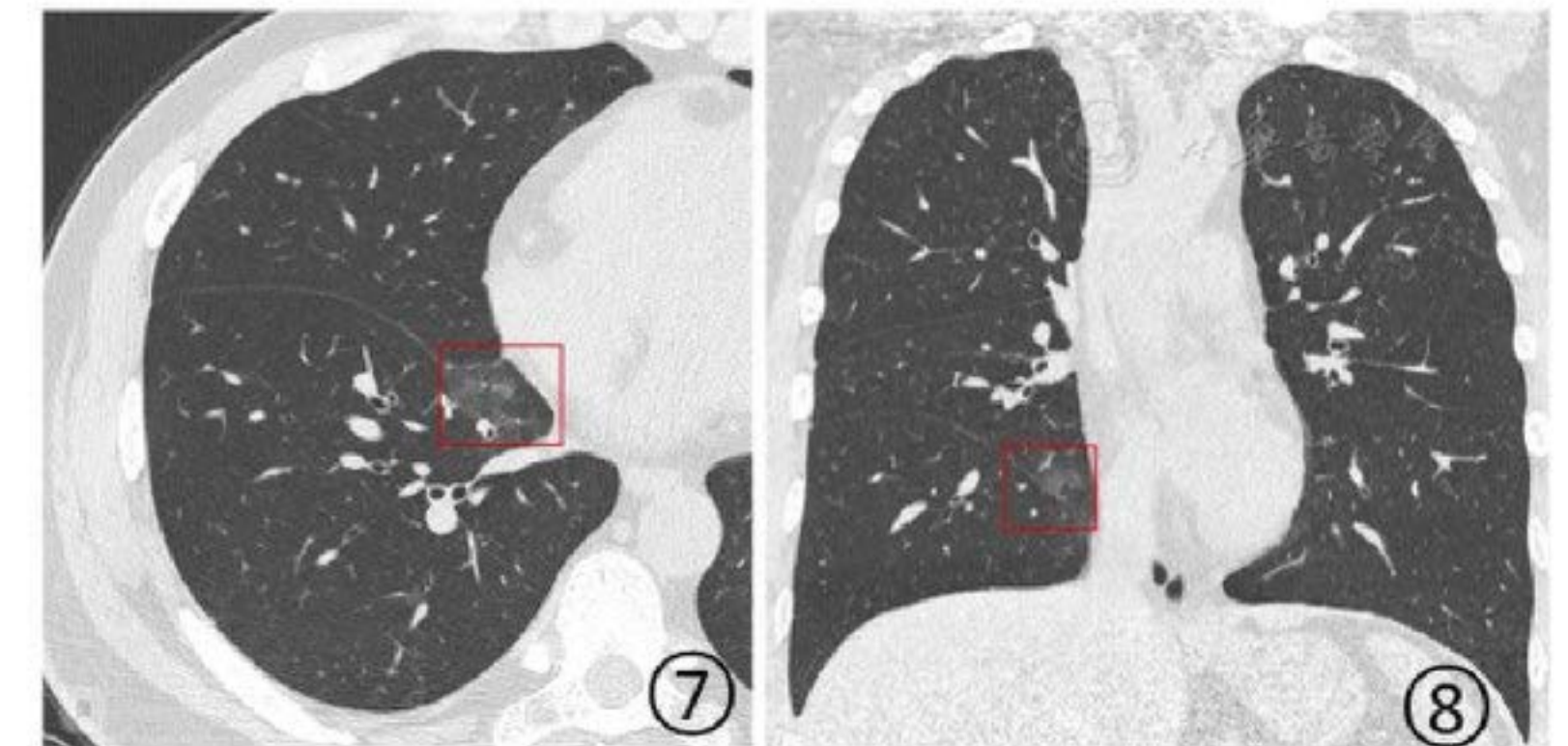
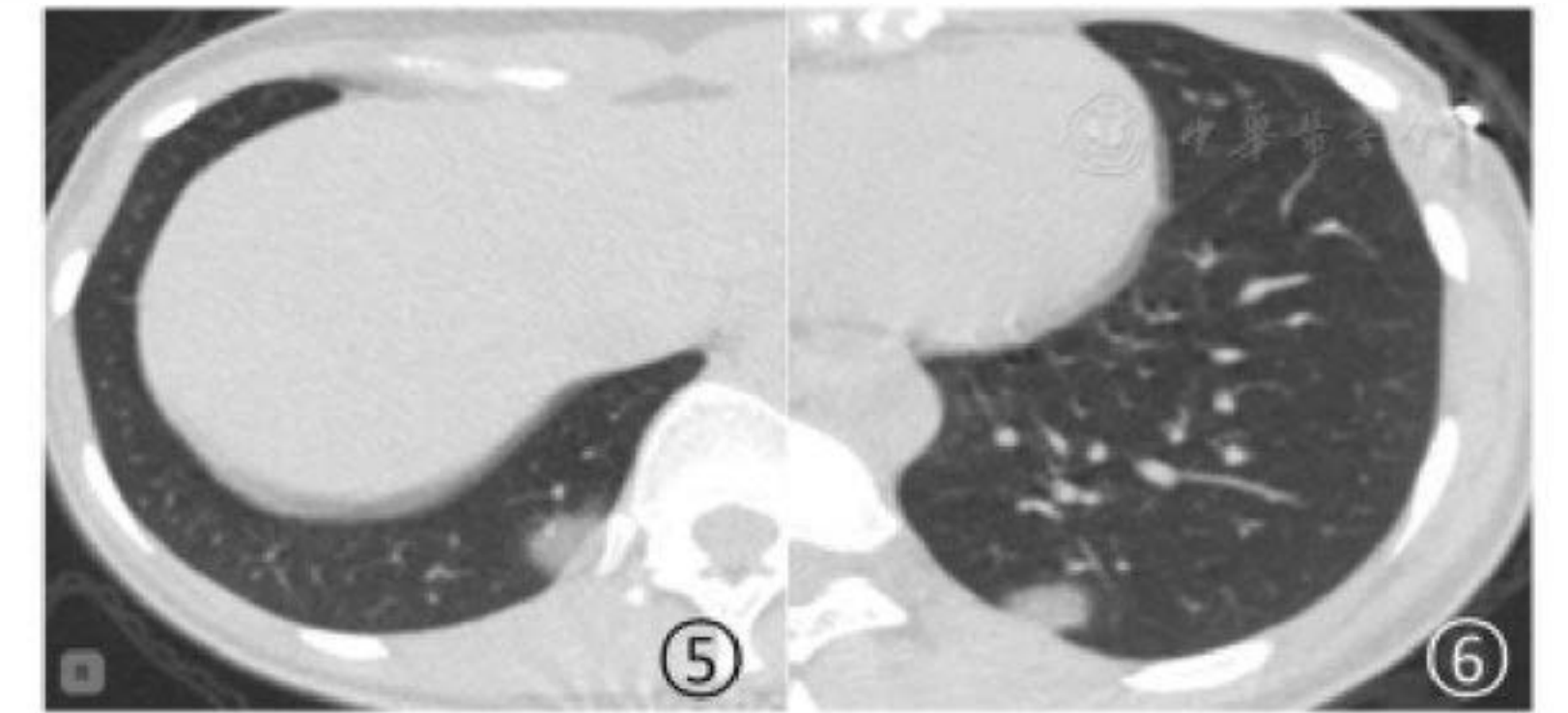
(三) 影像学表现-CT Imaging findings-CT

早期:

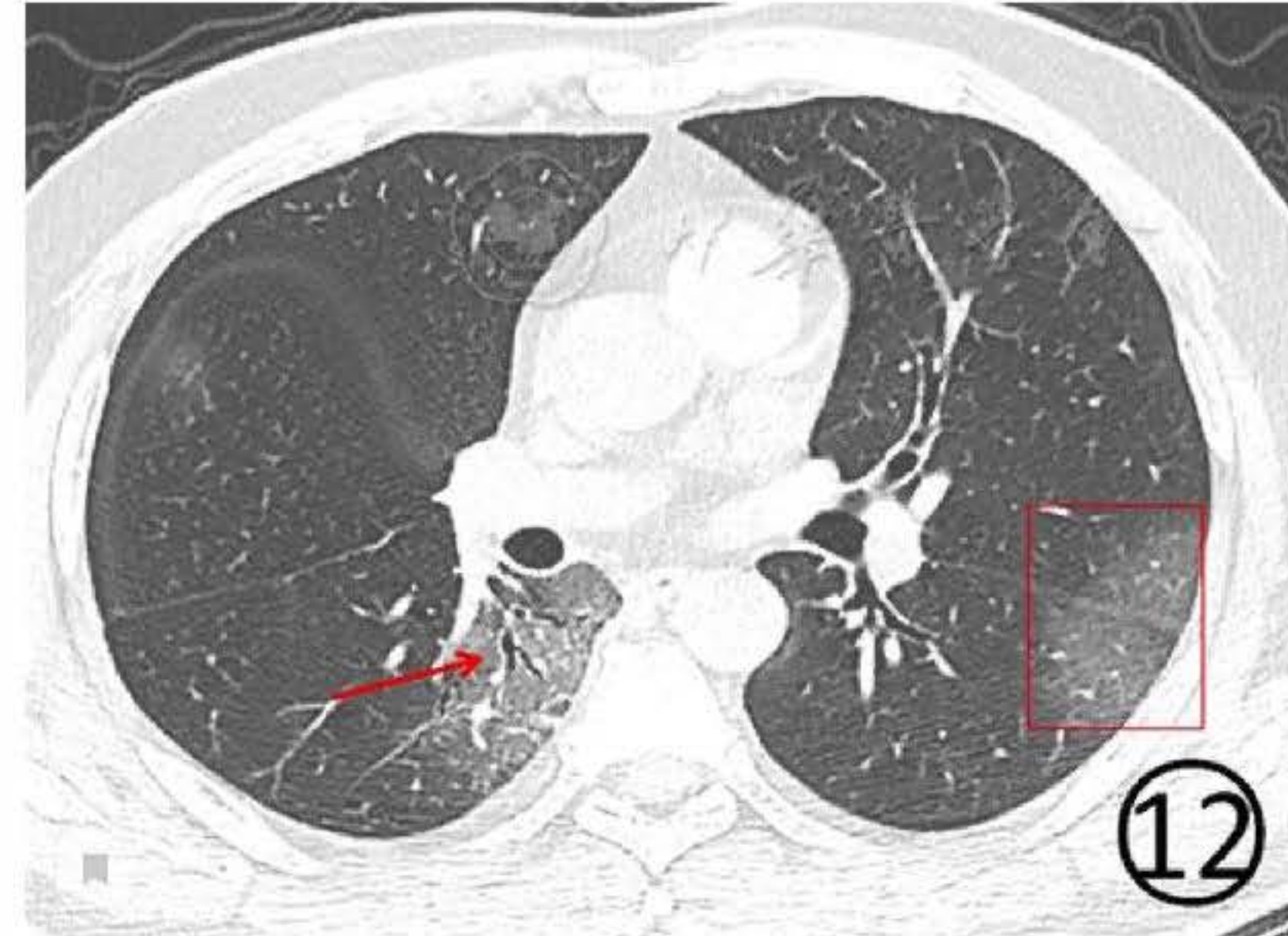
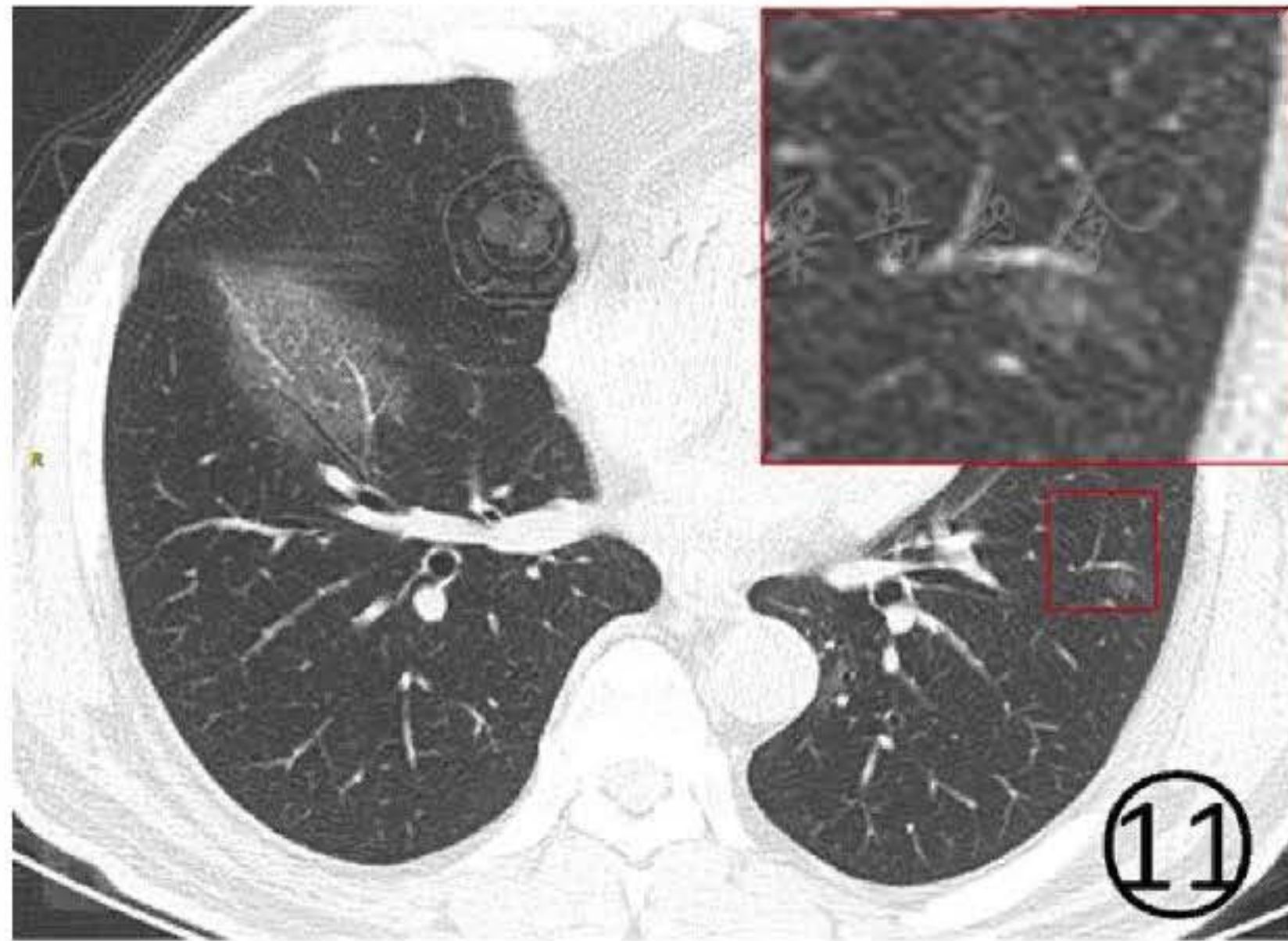
- 单发或多发的局限性磨玻璃阴影、结节 (图5, 图6)
- 或非常淡薄的小斑片磨玻璃阴影 (图7, 图8)
- 或大片磨玻璃阴影 (图9, 图10), 多数磨玻璃阴影边缘不清, 部分边缘清晰。
- 病变多分布于中、下叶, 多位于胸膜下 (图5, 图6)
或叶间裂下 (图7, 图8), 或者沿支气管血管束分布

Early:

- Single or multiple localized ground glass shadows and nodules (figure 5, figure 6).
- Or very thin patches of ground glass shadow (figure 7, figure 8).
- Or a large piece of ground glass shadow (figure 9, figure 10), most ground glass shadow edge is not clear, part of the edge is clear.
- Most of the lesions were distributed in the middle and lower lobes, mostly under the pleura (Fig. 5, Fig. 6).
- Or under the interlobar fissure (Fig. 7, Fig. 8), or along the bronchovascular bundle



(三) 影像学表现-CT Imaging findings-CT



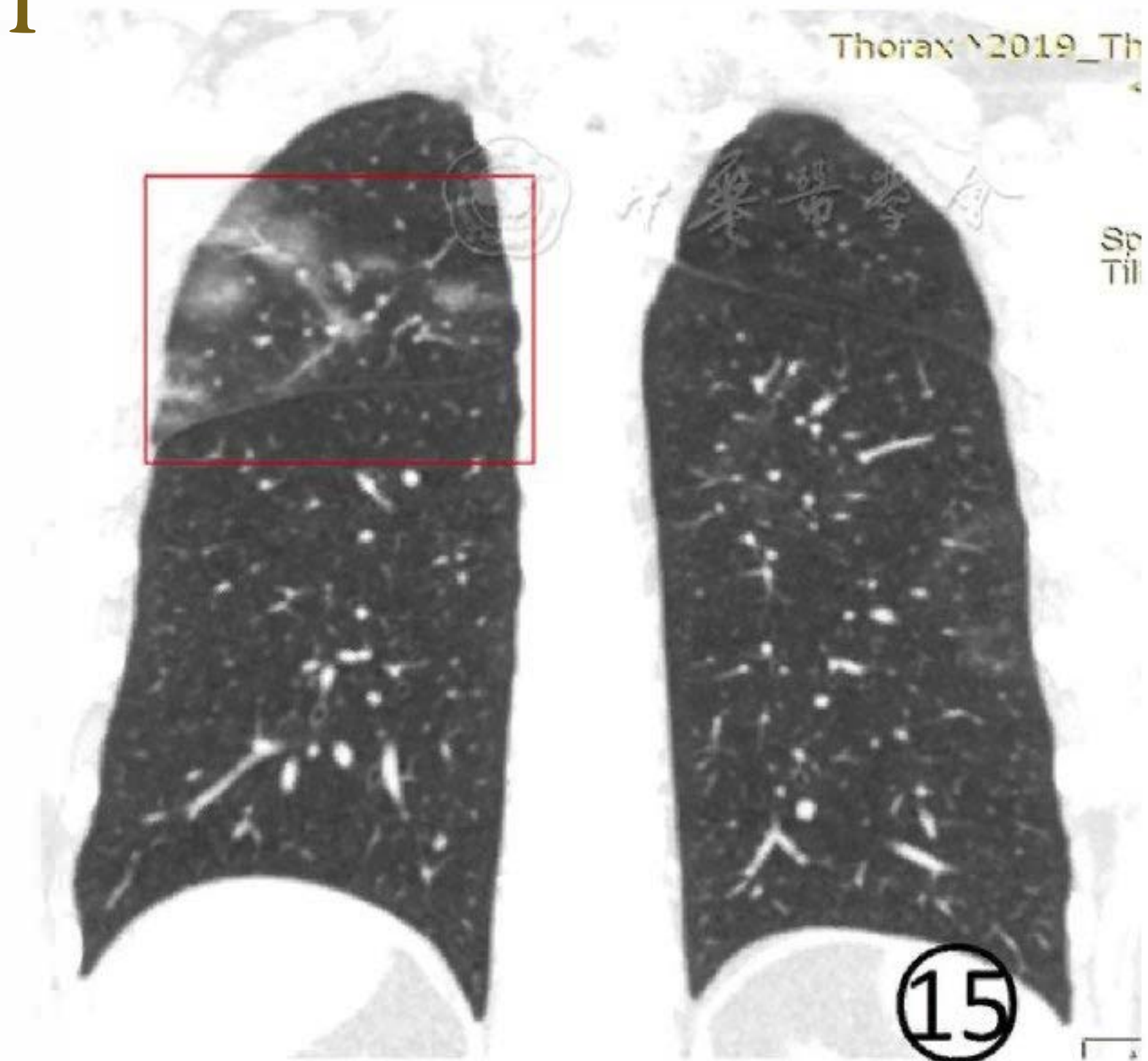
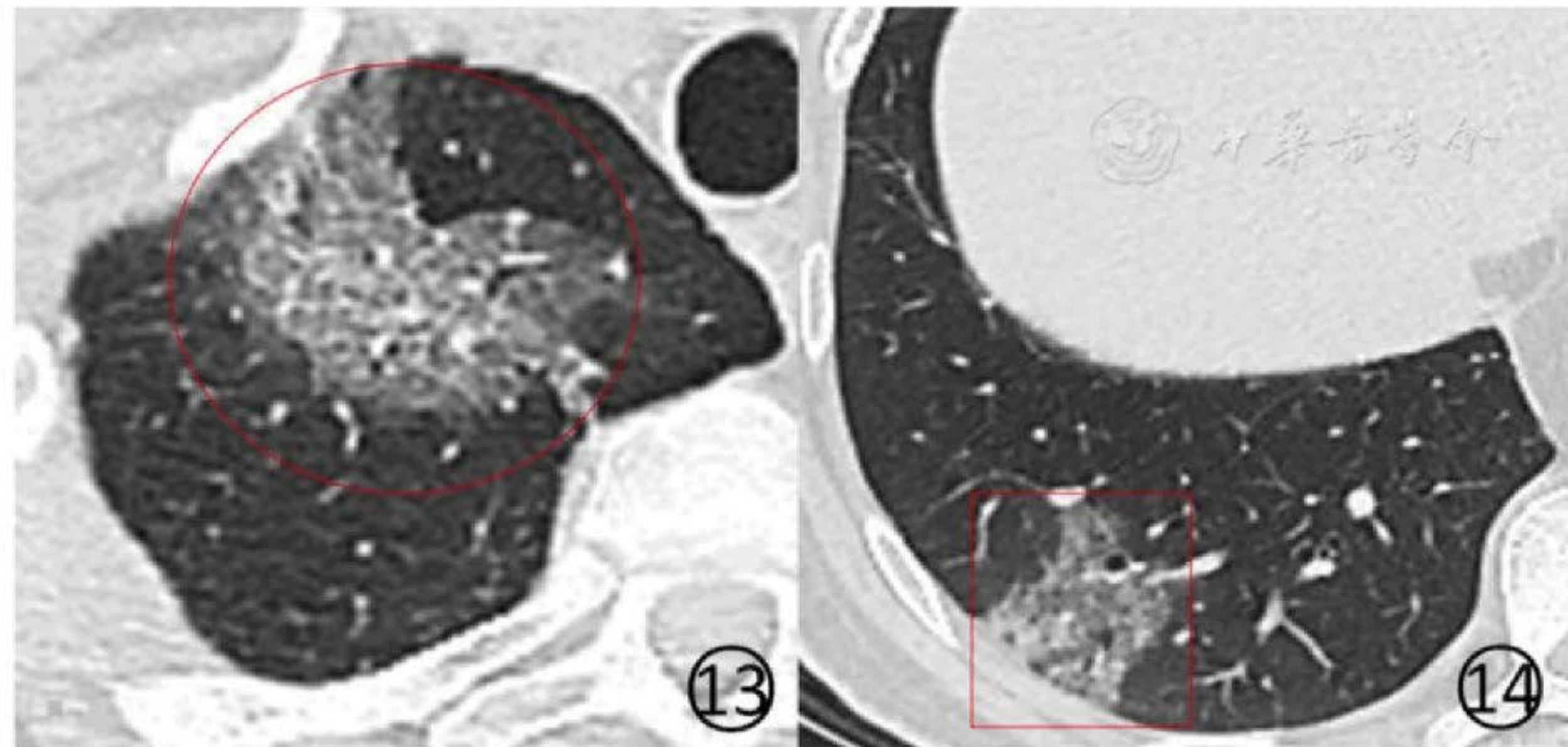
早期:

- 磨玻璃阴影内的细支气管管壁有增厚 (图11), 可见细支气管的充气支气管征 (图11)
- 血管影增粗, 边缘欠光整, 邻近的叶间胸膜有轻度增厚 (图12)

Early:

- The wall of the bronchioles in the ground glass shadow is thickened (figure 11), and the air bronchiole sign of the bronchioles can be seen (figure 11).
- The vascular shadow is thickened, the edge is not smooth, and the adjacent interlobar pleura is slightly thickened (figure 12).

(三) 影像学表现-CT Imaging findings-CT



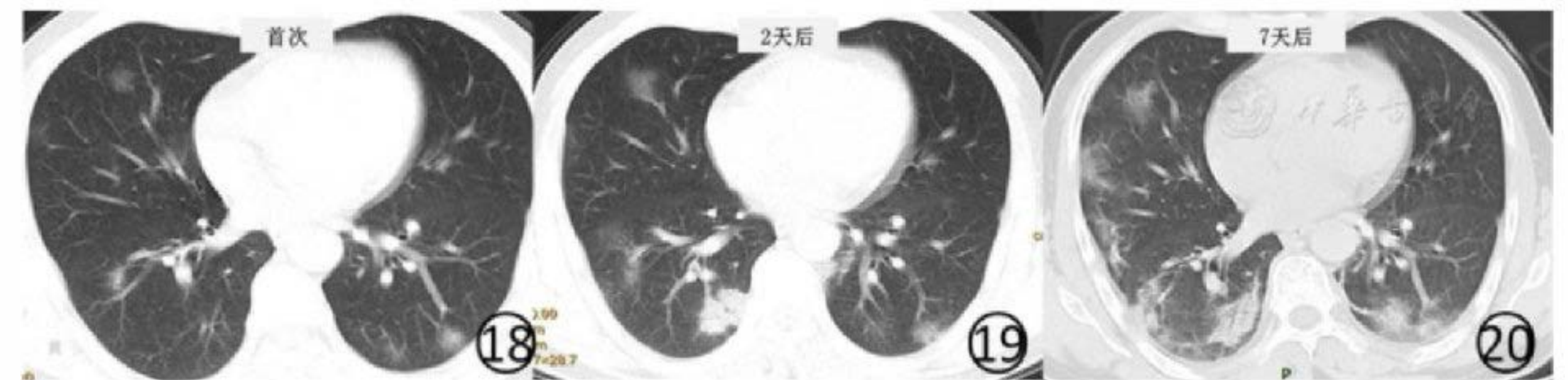
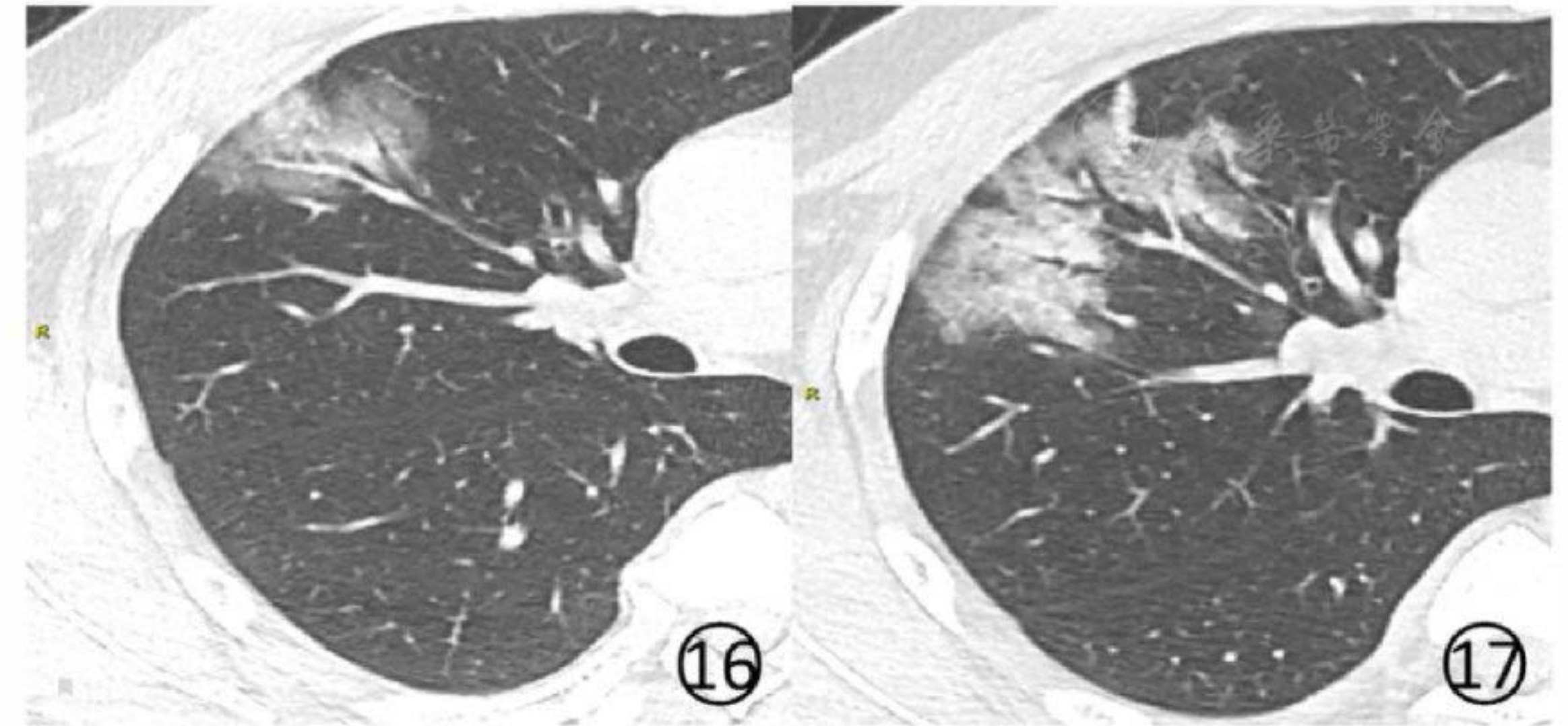
早期 Early :

- 部分病变呈亚段性分布的大片磨玻璃阴影，病变内小血管增多，类似于细网格状阴影或“铺路石征”（图13，图14）。
- 部分磨玻璃阴影有“反晕征”（图15）。
- Some of the lesions showed subsegmental ground glass shadows, with an increase of small blood vessels in the lesions, similar to fine mesh shadows or "paving stone signs" (Fig. 13, Fig. 14).
- Some ground glass shadows have "anti-halo sign" (figure 15).

(三) 影像学表现-CT Imaging findings-CT

进展期 Progress:

- 病变进展时常见有**多发新病灶出现**。新病灶CT表现与上述早期病灶相似。原有病变多数病灶范围扩大，病灶内出现大小、程度不等的实变（图16，图17）
- Multiple new lesions are often seen in the progression of lesions. The CT findings of the new lesions were similar to those of the early lesions mentioned above. The scope of most of the original lesions was enlarged, and consolidation of varying sizes and degrees appeared in the lesions (Fig. 16, Fig. 17).
- 有结节和晕征、实变病灶内可见空气支气管征。原有磨玻璃阴影或实变影也可融合或部分吸收，融合后病变范围和形态常发生变化，不完全沿支气管血管束分布（图18，图19，图20）。
- There are nodule and halo sign, air bronchial sign can be seen in the consolidation focus. The original ground glass shadow or solid shadow can also be fused or partially absorbed, and the scope and shape of the lesions often change after fusion, which are not completely distributed along the bronchovascular bundle (Fig. 18, Fig. 19, Fig. 20).



(三) 影像学表现-CT Imaging findings-CT

重症期 Critical period:

- 病变进一步进展，双肺弥漫性实变，密度不均，其内空气支气管征与支气管扩张，非实变区可呈斑片状磨玻璃阴影表现，双肺大部分受累时呈“白肺”表现（图21），叶间胸膜和双侧胸膜常见增厚，并少量胸腔积液，呈游离积液或局部包裹表现。
- The lesion progressed further, with diffuse consolidation of both lungs, uneven density, air bronchial sign and bronchiectasis, patchy ground glass shadow in the non-consolidation area, and "white lung" when most of the lungs were involved (figure 21). Interlobar pleura and bilateral pleural thickening, and a small amount of pleural effusion, showing free effusion or local wrapping.



(四) 诊断标准 Diagnostic Criteria



1、疑似病例

(1)流行病学史:

1)发病前14天内有武汉市及周边地区, 或其他有病例报告社区的旅行史或居住史;

2)发病前14天内与新型冠状病毒感染者(核酸检测阳性者)有接触史;

3)发病前14天内曾接触过来自武汉市及周边地区, 或来自有病例报告社区的发热或有呼吸道症状的患者;

4)聚集性发病。

There are two cases to determine **suspected cases**:

- People can be diagnosed as suspected cases if they meet any one of the epidemiological history and any two of the clinical manifestations (Fever and/or respiratory symptoms; Imaging features of the above pneumonia; The total number of white blood cells in the early stage is normal or decreased, and the lymphocyte count is decreased).

(四) 诊断标准 Diagnostic Criteria



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- If lack of clear epidemiological history , one can also be diagnosed if he or she meets three of the clinical manifestations that are mentioned above.

(2)临床表现

- 1)发热和/或呼吸道症状;
- 2)具有上述COVID-19影像学特征;
- 3)发病早期白细胞总数正常或降低,淋巴细胞计数正常或减少。

有流行病学史中的任何一条,且同时符合临床表现中任意2条。无明确流行病学史的,符合临床表现中的3条。

(四) 诊断标准 Diagnostic Criteria



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2、确诊病例

疑似病例，具备以下病原学证据之一者：

- (1) 实时荧光RT-PCR检测新型冠状病毒核酸阳性；
- (2) 病毒基因测序，与已知的新型冠状病毒高度同源。
- (3) 血清学检测：新型冠状病毒特异性IgM抗体和IgG阳性或新型冠状病毒特异性IgG抗体由阴性转为阳性或恢复期较急性期4倍及以上升高。

A **confirmed case** requires a positive result based on evidence of the disease:

1. RT-PCR was used to detect the nucleic acid positivity of the novel coronavirus;
2. Viral gene sequencing, highly homologous to the known SARS-CoV-2.

3、疑似病例排除标准。

疑似病例排除需满足：连续两次新型冠状病毒核酸检测阴性（采样时间至少间隔24小时），且发病7天后新型冠状病毒特异性抗体IgM和IgG仍为阴性。



(五) 临床分型 Clinical Typing

- 1、**轻型**：临床症状轻微，影像学未见肺炎表现。
- 2、**普通型**：具有发热、呼吸道等症状，影像学可见肺炎表现。
- 3、**重型（成人）**：
符合下列任何一条：
 - (1)呼吸窘迫，RR≥30次/分；
 - (2)静息状态下，指氧饱和度≤93%；
 - (3)动脉血氧分压 (PaO₂)/吸氧浓度 (FiO₂)≤300mmHg(1mmHg=0.133kPa)

高海拔（海拔超过1000米）地区应根据以下公式对PaO₂/FiO₂进行校正： $PaO_2/FiO_2 \times [大气压(mmHg)/760]$

- Mild type

The clinical symptoms were mild and there was no sign of pneumonia on imaging examinations.

- Normal type.

With fever, respiratory tract and other symptoms, imaging can see pneumonia manifestations.

- Serious type.

Compliance with any of the following conditions:

1. shortness of breath, RR≥30 times/min;
2. oxygen saturation ≤ 93% at rest;
3. Arterial partial pressure of oxygen (PaO₂)/oxygen uptake concentration (FiO₂) < 300 mmHg (1 mmHg = 0.133 kPa).

(五) 临床分型型 Clinical Typing



4、危重型:

符合以下情况之一者:

- (1)出现呼吸衰竭, 且需要机械通气;
- (2)出现休克;
- (3)合并其他器官功能衰竭需ICU监护治疗。

- Critical type.

Those who meet one of the following conditions can be diagnosed as critical type:

1. Respiratory failure occurs and mechanical ventilation is required;
2. Shock;
3. Patients with other organ failure that need to be admitted to intensive care units(ICU).

(五) 临床分型型 Clinical Typing



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重型（儿童）：

1. 出现气促（<2月龄，RR \geq 60次/分；2~12月龄，RR \geq 50次/分；1~5岁，RR \geq 40次/分；>5岁，RR \geq 30次/分），除外发热和哭闹的影响；
2. 静息状态下氧饱和度 \leq 92%；
3. 辅助呼吸（呻吟、鼻翼扇动、三凹征），发绀，间歇性呼吸暂停；
4. 出现嗜睡、惊厥；
5. 拒食或喂养困难，有脱水征。

5、重型、危重型临床预警指标

（一）成人

1. 外周血淋巴细胞进行性下降；
2. 外周血炎症因子如IL-6、C-反应蛋白进行性上升；
3. 乳酸进行性升高；
4. 肺内病变在短期内迅速进展。

（二）儿童

1. 呼吸频率增快；
2. 精神反应差、嗜睡；
3. 乳酸进行性升高；
4. 影像学显示双侧或多肺叶浸润、胸腔积液或短期内病变快速进展者；
5. 3月龄以下的婴儿或有基础疾病（先天性心脏病、支气管肺发育不良、呼吸道畸形、异常血红蛋白、重度营养不良等）、有免疫缺陷或低下（长期使用免疫抑制剂）者。



(六) 鉴别诊断

Differential Diagnosis

- 1、新型冠状病毒感染轻型表现需与其它病毒引起的上呼吸道感染相鉴别。
- 2、新型冠状病毒肺炎主要与流感病毒、副流感病毒、腺病毒、SARS冠状病毒等其他已知病毒性肺炎鉴别。尤其是对疑似病例要尽可能采取包括快速抗原检测和多重PCR核酸检测等方法，对常见呼吸道病原体进行检测。
- 3、还要与非感染性疾病，如血管炎、皮肤炎和机化性肺炎等鉴别。

The differential diagnosis of related diseases should be proposed based on mild symptoms and pneumonia of COVID-19. Such as, mild manifestations caused by SARS-CoV-2 infection need to be distinguished from infections of upper respiratory tract caused by other viruses, and the SARS-CoV-2 is mainly differentiated from influenza virus, adenovirus, respiratory syncytial virus and other known viral pneumonia and mycoplasma pneumoniae infections. The sixth edition emphasize that “Especially for suspected cases, methods including rapid antigen detection and multiplex PCR nucleic acid detection should be adopted as far as possible to detect common respiratory pathogens”.



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预防及治疗
Prevention and
treatment



(一) 预防

1、一般预防:

(1)目前尚无可供使用的疫苗。

(2)WHO建议国际旅客进出受影响地区时,采取常规预防措施,包括:

1)避免与急性呼吸道感染者产生密切接触;

2)勤洗手,尤其是与患病者或其周边环境接触后;

3)遵从适当的咳嗽礼节:咳嗽时用肘部遮住口鼻;

4)避免进食生的或烹煮欠熟的动物制品;

5)并避免与活或死的农场或野生动物产生密切接触。

(一) 预防 Prevention



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2、中医药预防 Traditional Chinese medicine prevention:

- 根据中医“治未病”理论与中医防治疾病的理论和经验，预防疾病主要是在日常生活中要注意养生保健、合理饮食、劳逸结合、增强体质，增强抵御外邪之能力。
- According to the theory of "preventive treatment of disease" and the theory and experience of prevention and treatment of diseases in traditional Chinese medicine, the main way to prevent diseases is to pay attention to health care, reasonable diet, combination of work and rest, strengthen physique and enhance the ability to resist external evil in daily life.
- 结合杭州地理环境湿气重，今年暖冬易生内热，当前气温偏低有外寒的特点，易出现内有湿热、外有寒邪的身体状态，且正气不足者更易感染。从中医药的角度预防主要以“健脾固本、扶正祛邪”为总则，去邪以内清湿热，外解寒邪，扶正以健脾补肺。
- Combined with the heavy humidity in the geographical environment of Hangzhou, the warm winter this year which is easy to produce internal heat and the current low temperature which has the characteristics of external cold, it is easy to appear the body state of dampness and heat inside and cold evil outside, and those with insufficient vital qi are more likely to be infected. From the point of view of traditional Chinese medicine, prevention is mainly based on "invigorating the spleen and strengthening the foundation, strengthening the body and dispelling evil" as the general principle, removing evil in order to clear dampness and heat inside, resolving cold evil outside, strengthening the spleen and tonifying the lung.



(一) 預防 prevention

- 高风险人群预防用方 Preventive measures for high-risk groups : 玉屏风散加減 modified jade screen powder

生黄芪 Sheng Huangqi 15g, 防风 Fangfeng 10g, 生白术 Sheng Baizhu 12g, 银花 Yinhuo 10g, 藿香 Huoxiang 10g, 苏叶 Suye 10g, 芦根 Lugen 15g (鲜芦根尤佳 fresh one (Xian Lugen) is better), 生甘草 Sheng Gancao 6g。用法 Usage: 水煎, 口服 take decocted epimedium soup.

- 外用方 Topical decoction: 藿香 Huo xiang 20g, 制苍术 Zhi Cang zhu 20g, 菖蒲 Chang pu 15g, 草果 Cao guo 10g, 白芷 Bai zhi 12g, 艾叶 Ai ye 10g, 苏叶 Su ye 15g, 贯众 Guan zhong 20g。

功效 Efficacy: 燥湿化浊, 芳香辟秽 Dampness and turbidity。用法 Usage: 水煎, 室内熏蒸或研末制成香囊佩戴 take decocted epimedium soup, Indoor fumigation or wear Chinese medicine sachet.



(一) 预防 prevention

- **中药香囊 Chinese medicine sachet** : 用中药香囊抑制流行性疾病起源于明代的《瘟疫论》，可将丁香、苍术、紫苏、艾叶、白芷、薄荷、肉桂等各2g,药料研细并过筛，装入小布袋，每袋约10-15g，放在家里或佩带身上，可起到避邪除秽、调摄养生和一定的预防疾病作用 Traditional Chinese medicine sachets used to suppress epidemic diseases originated from the Wen yi lun of the Ming Dynasty. Dingxiang, Cangzhu, Zisu, Aiye, Baizhi, Bohe, Rougui and other 2g each can be ground and sieved into small cloth bags Each bag is about 10-15g, which can be used as fumigation at home or wear it to prevent evils, remove filth, regulate health, and prevent diseases.

(一) 预防prevention



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杭州市西溪医院香囊成分Xixi Hospital of Hangzhou sachet composition :

丁香Dingxiang 3g, 白芷Baizhi 6g, 薄荷Bohe 9g,

防风Fangfeng 3g, 冰片Bingpian 1g, 艾叶Aiye 9g,

石菖蒲ShiChangpu 3g, 小茴香XiaoHuixiang3g, 山奈Shannai 6g,

广藿香GuangHuoxiang 9g, 肉桂Rougui 3g, 沉香曲ChenXiangqu 3g,

虎杖Huzhang 9g, 苍术Cangzhu 6g



(一) 预防prevention

- 穴位敷贴Point application :

- 运脾化湿贴Yunpi Huashi Point application :

- 主要成分Main ingredients : 苍术Cangzhu 5g, 花椒Huajiao 3g, 生姜Shengjiang 5g, 草豆蔻CaoDoukou 5g, 丁香Dingxiang 5g。

- 所贴部位Posted area: 神阙穴Shenque acupoint

- 宣肺解毒贴Xuanfei Jiedu Point application :

- 主要成分Main ingredients : 炙麻黄ZhiMahuang 4g, 苦杏仁Kuxingren 5g, 栀子Zhizi 4g, 黄芩Huangqin 5g, 芥子Jiezi 5g, 桂枝Guizhi 5g。

- 所贴部位Posted area: 膻中穴Danzhong acupoint、大椎穴Dazhui acupoint.

(二) 基本治则



没有证据建议对疑似或确诊的新型冠状病毒感染给予任何特定治疗措施。应遵循其他严重急性呼吸道感染的建议，包括：

There is no evidence to recommend any specific treatment for suspected or confirmed novel coronavirus infection. Other severe acute respiratory infection's suggestions should be followed, including:

- 1、采取感染控制措施，包括标准、飞沫、空气传播、眼部和接触性防护；
- 2、对脓毒症进行治疗(如有)；
- 3、支持治疗(如给氧、补液、经验性抗生素治疗；插管、机械通气等)；
- 4、对重症病人或潜在重症病人进行密切监控。

1. Take infection control measures, including standard, droplets, airborne, eye and contact protection;
2. To treat sepsis (if any);
3. Supportive treatment (such as oxygen, fluid replacement, empirical antibiotic therapy, intubation, mechanical ventilation, etc.);
4. Closely monitor the critically ill patients or potential critically ill patients.



(三) 治疗 Treatment

一般治疗:

- 1、卧床休息，加强支持治疗，保证充分热量；注意水、电解质平衡，维持内环境稳定；密切监测生命体征、指氧饱和度等。
- 2、根据病情监测血常规、尿常规、CRP、生化指标(肝酶、心肌酶、肾功能等)、凝血功能，动脉血气分析，胸部影像学等。有条件这可行细胞因子检测。
- 3、及时给予有效氧疗措施，包括鼻导管、面罩给氧，必要时经鼻高流量氧疗。

Treatments include isolation, supportive treatment, and close monitoring of changes, especially vital signs and oxygen saturation. Suspected cases should be treated in isolation, while confirmed cases can be admitted to the same ward. Critical cases should be admitted to the ICU as soon as possible.



(三) 治疗 Treatment

一般治疗:

- 4、抗病毒治疗: 可试用 α -干扰素雾化吸入(成人每次500万U或相当剂量, 加入灭菌注射用水2ml, 每日2次); 洛匹那韦/利托那韦(200mg/50mg, 每粒)每次2粒, 每日2次, 疗程不超过10天。利巴韦林(建议与干扰素或洛匹那韦/利托那韦联合应用, 成人500mg/次, 每日2-3次静注, 疗程不超过10天)。磷酸氯喹(成人500mg, 每日2次)和阿比多尔(成人200mg, 每日3次)。要注意上述药物的不良反应、禁忌症以及与其他药物的相互作用等问题。建议在临床应用中进一步评价目前所试用药物的疗效。不建议同时应用3种及以上抗病毒药物, 出现不可耐受的毒副作用时应停止使用相关药物。对孕产妇患者的治疗应考虑妊娠周数, 尽可能选择对胎儿影响较小的药物, 以及是否终止妊娠后再进行治疗的问题, 并知情告知。
- 5、抗菌药物治疗: 避免盲目或不恰当使用抗菌药物, 尤其是联合使用广谱抗菌药物。

The sixth version of the protocol stated that the course of treatment should not exceed 10 days, and the use of three or more antiviral drugs at the same time is not recommended. Version 6th added that chloroquine phosphate (adults 500mg, twice a day) and abedole (adults 200mg, three times a day) are regarded as trial drugs on the basis of α -interferon, lopinavir/litonavir and ribavirin, and recommended the combination of ribavirin with interferon or lopinavir/litonavir.

Most of the drugs and methods for COVID-19 are based on some experience in their drug registration indications. The role of these antiviral drugs in the treatment of COVID-19 needs to be comprehensively evaluated. Many of these drugs have some side effects and are not recommended in combination.



(三) 治疗 Treatment

重型、危重型治疗 Treatment of serious and critical cases:

1、治疗原则：在对症治疗的基础上，积极防治并发症，治疗基础疾病，预防继发感染，及时进行器官功能支持。

We should actively prevent and treat complications, treat basic diseases, prevent secondary infection, and timely support organ function. Patients often have anxiety and fear, so psychological counseling should be strengthened.

2、呼吸支持：

(1)氧疗：重型患者应当接受鼻导管或面罩吸氧，并及时评估呼吸窘迫和(或)低氧血症是否缓解。有条件可采用氢氧混合吸入气（H₂/O₂：66.6%/33.3%）治疗。

(2)高流量鼻导管氧疗或无创机械通气：当患者接受标准氧疗后呼吸窘迫和(或)低氧血症无法缓解时，可考虑使用高流量鼻导管氧疗或无创通气。若短时间(1-2小时)内病情无改善甚至恶化，应当及时进行气管插管和有创机械通气。

(三) 治疗 Treatment



(3)有创机械通气：采用肺保护性通气策略，即小潮气量(4-8ml/kg理想体重)和低吸气压力(平台压 $<30\text{cmH}_2\text{O}$)进行机械通气，以减少呼吸机相关肺损伤。较多患者存在人机不同步，应当及时使用镇静以及肌松剂。根据气道分泌物情况，选择密闭式吸痰，必要时行支气管镜检查采取相应治疗。

(4)挽救治疗：对于严重ARDS患者，建议进行肺复张。在人力资源充足的情况下，每天应当进行12小时以上的俯卧位通气。俯卧位通气效果不佳者，如条件允许，应当尽快考虑体外膜肺氧合(ECMO)。ECMO相关指征：①在 $\text{FiO}_2 > 90\%$ 时，氧合指数小于80mmHg，持续3-4小时以上；②气道平台压 $\geq 35\text{cmH}_2\text{O}$ 。

Treatment for serious and critical patients is respiratory support. For patients who need respiratory support. If noninvasive mechanical ventilation (1-2 hours) does not improve or worsen the condition, or the patient cannot tolerate it, transition to invasive mechanical ventilation in a timely manner. For patients with severe ARDS, pulmonary reexpansion is recommended. On the premise of adequate human resources, prone position ventilation should be performed for more than 12 hours a day. If prone position ventilation is not effective, extracorporeal membrane oxygenation (ECMO) should be considered as soon as possible if conditions permit.

(三) 治疗 Treatment

- 3、循环支持：充分液体复苏的基础上，改善微循环，使用血管活性药物。进行无创或有创血流动力学监测，在救治过程中，注意液体平衡策略，避免过量和不足。
- 4、康复者血浆治疗；适用于病情进展较快、重型和危重型患者。
- 5、免疫治疗：对于双肺广泛病变者及重型患者，且实验室检测IL-6水平升高者，可试用托珠单抗治疗。首次剂量 4-8 mg/kg，推荐剂量为400 mg、0.9%生理盐水稀释至100 ml，输注时间大于1小时；首次用药疗效不佳者，可在12小时后追加应用一次（剂量同前），累计给药次数最多为2次，单次最大剂量不超过800 mg。注意过敏反应，有结核等活动性感染者禁用。
- 6、肾功能衰竭和肾替代治疗：除了查找肾功能损伤的原因外，对于肾功能衰竭的重症患者可选择连续性肾替代治疗（CRRT），同时给出治疗指征。
- 7、血液净化治疗：血液净化系统包括血浆置换、吸附、灌流、血液/血浆滤过等，能清除炎症因子，阻断“细胞因子风暴”，从而减轻炎症反应对机体的损伤，可用于重型、危重型患者细胞因子风暴早中期的治疗。

(三) 治疗 Treatment

8、其他治疗措施:

- 对于氧合指标进行性恶化、影像学进展迅速、机体炎症反应过度激活状态的患者，酌情短期内（3~5天）使用糖皮质激素，建议剂量不超过相当于甲泼尼龙1~2mg/kg/日，应当注意较大剂量的糖皮质激素由于免疫抑制作用，会延缓对冠状病毒的清除；

Rehabilitation plasma therapy: Suitable for patients with rapid progression, heavy and severe illness.

For patients with progressive deterioration of oxygenation indicators, rapid imaging progress, and excessive activation of the body's inflammatory response, use glucocorticoids as appropriate in the short term (3 to 5 days).

The recommended dose does not exceed the degree that is equivalent to methylprednisolone taken by 1 to 2 mg / kg /day . It should be noted that a larger dose of glucocorticoids will delay the clearance of coronavirus due to immunosuppressive effect.



(三) 治疗 Treatment

8、其他治疗措施:

- 可静脉给予血必净100mL/日，每日2次治疗；

Xuebijing 100ml/day can be given intravenously twice a day.

- 可使用益生菌、益生元、合生素等肠道微生态调节剂，维持肠道微生态平衡，预防继发细菌感染；
Intestinal microecological regulators can be used to maintain the intestinal microecological balance and prevent secondary bacterial infections;
- 儿童重型、危重型病例可酌情考虑给予静脉滴注丙种球蛋白。
- 患有重型或危重型新型冠状病毒肺炎的孕妇应积极终止妊娠，剖腹产为首选。
- 患者常存在焦虑、恐惧情绪，应加强心理疏导。

(三) 治疗 Treatment



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经典药物应用于COVID-19的研究 Study on application of classic drugs to COVID-19 :

1、一项临床试验已在我国进行注册，以测试洛匹那韦/利托那韦和干扰素- α -2b在新型冠状病毒感染患者中的疗效和安全性[10] A clinical trial has been registered in China to test the efficacy and safety of lopinavir / ritonavir and interferon- α -2b in patients with new coronavirus infections [10].

2、由蒋华良院士、饶子和院士领衔，20余个课题组参与的中国科学院上海药物研究所和上海科技大学免疫化学研究所抗COVID-19病毒感染联合应急攻关团队，利用前期抗SARS药物研究积累的经验，开展抗COVID-19药物研究，发现了20余种可能对新型肺炎有治疗作用的老药和中药。其中中药包括：(实际临床效果仍需进一步验证)

- 脱氧土大黄苷，改善微循环，大黄提取物Deoxyrhein, improving microcirculation, rhubarb extract ;
- 虎杖苷，改善微循环，虎杖提取物Polydatin, improved microcirculation, Polygonum cuspidatum extract ;
- 山豆根查尔酮，清热解毒，山豆根提取物Vigna Root Chalcone, Clearing Heat and Detoxifying, Mountain Bean Root Extract ;
- 紫草素，抗肿瘤、抗炎症，紫草提取物Shikonin, antitumor, anti-inflammatory, shikonin extract ;

(四) 中医治则 TCM therapeutic principle



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1. 重视“辨病为主、病证结合、专病专方” Attach importance to “disease differentiation, combination of diseases and syndromes, and special prescriptions for diseases” : 根据某一疫病皆有相同症状的特点, 要求治疗的针对性。According to the characteristics that a certain epidemic disease has the same symptoms, the pertinence of treatment is required. 吴又可在《温疫论》中说“然则何以知其为疫? 盖脉证与盛行之年所患之症, 纤悉相同, 至于用药、取效, 毫无差别”。 Wu Youke said in *Wen Yi Lun* “How do you know that it is an epidemic? The symptoms of the pulse and the symptoms of the prevalent years are the same, and there is no difference in medication and effectiveness.” 因此要重视“辨病为主、专病专方”。 Therefore, we should pay attention to “disease differentiation first, special prescription for diseases”. 吴又可深刻指出: “一病只有一药之到而病自己, 不烦君臣佐使品味加减之劳矣。” Wu Youke profoundly point out: “ There is only one medicine for the disease, so don't bother to use the monarch, minister, assistant and guide to form a prescription ” 在把握疾病演变过程中主要证候的基础上进行辨证论治。 To carry out syndrome differentiation and treatment on the basis of grasping the main syndromes in the process of disease evolution.

(四) 中医治则 TCM therapeutic principle



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2.重视体质因素 Attach importance to physical factors: 发病程度与感染毒株毒力强弱有关，但与体质强弱亦密切相关。 The degree of the disease is related to the virulence of the infected strain, but it is also closely related to the physical strength.

3.要重视疫毒的病性 Attention should be paid to the disease of epidemic virus. : 新型冠状病毒感染性肺炎是急性传染病，属于中医的疫毒，不等同于“四时温病”。 COVID-19 is an acute infectious disease, which belongs to the epidemic toxin of traditional Chinese medicine, which is not equal to “seasonal febrile disease”.立足点要针对“疫毒”的病理表现及特点，离开了“疫毒”就离开了主要病因。 The foothold should be aimed at the pathological manifestations and characteristics of the "epidemic virus". If we leave the "epidemic virus", we should leave the main cause of the disease.因此，发病过程中由毒而热、由毒而喘、由毒而瘀、由毒而脱、由毒而虚，从病机而论有湿毒、热毒、瘀毒等不同的病性，故治之当不离毒，“逐邪为第一要义”。 Therefore, in the course of the disease, there are different diseases, such as dampness, heat and stasis, from poison to heat, from poison to asthma, from poison to stasis, from poison to detoxification, and from poison to deficiency. Therefore, the treatment should not be separated from poison, and "expelling evil is the first essence". 《温疫论》对疫病的治则提出“大凡客邪贵乎早逐”“邪不去则病不愈”，强调“有邪必逐，除寇务尽”为其指导思想。 The principle for the treatment of the epidemic disease in the Theory of febrile epidemic puts forward that "if the evil does not go away, the disease will not be cured", and emphasizes that "if there is evil, you must drive away the evil and do all the work of the warriors" as its guiding ideology.



(四) 中医治则

Principles of traditional Chinese medicine treatment

4.要重视主要病变部位和主要证候: 新型冠状病毒感染性肺炎病位主要在肺, 除高热外, 干咳、胸闷、气促乃至呼吸窘迫及肺实变体征都说明了这一点, 其次伴有胃肠道症状, 危重期多见多脏器损伤。

Attention should be paid to the location of the main lesions and the main syndromes. The location of COVID-19 is mainly in the lung, which is illustrated by dry cough, chest tightness, shortness of breath and even respiratory distress and lung syndrome in addition to high fever. Secondly, COVID-19 is accompanied by gastrointestinal symptoms, and multiple organ injury is common in critical stage.

5.要重视根据病情的迅速变化判断轻症、重症并作出相应处理: 由于本病变化急骤, 有的患者病情迅速加重, 肺部多叶病变, 重症新型冠状病毒感染性肺炎出现休克、多器官功能障碍综合征, 因此很难以时间段分期, 要重视轻症与重症判断, 作出相应处理。

Attention should be paid to judging mild and severe cases according to the rapid changes of the disease and dealing with them accordingly. Due to the rapid change of the disease, some patients with rapid aggravation of the disease, pulmonary lobular disease, severe COVID-19 patients with shock, multiple organ dysfunction syndrome, so it is difficult to stage according to the course of the disease. We should pay attention to the judgment of mild and severe diseases and deal with them accordingly.

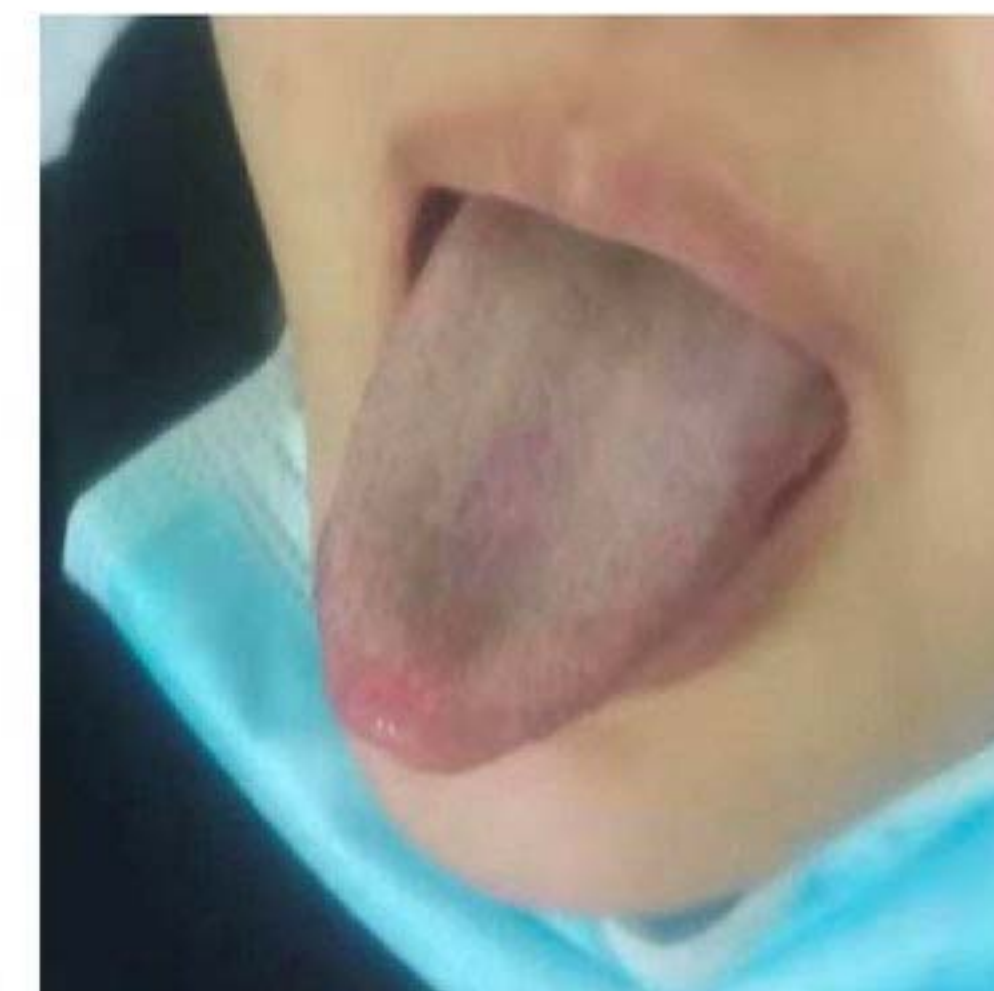


(四) 中医治则

Principles of traditional Chinese medicine treatment

6.根据新型冠状病毒感染性肺炎发病的特点，结合现代有关药理研究成果，提出针对该病临床演变规律的综合治疗方法：如不同病理阶段的治疗措施，早期截断扭转防止病情发展；后期扶持正气，预防肺间质病变；危重阶段配合西医抢救；如何减少抗生素与激素的副作用等，总结更新中医治疗方案。

According to the characteristics of COVID-19, combined with the results of modern pharmacological research, we should put forward comprehensive treatment methods for the clinical evolution of the disease: such as treatment measures in different pathological stages, early truncation and torsion to prevent the development of the disease; support for vital qi in the later stage to prevent pulmonary interstitial lesions; critical stage with western medicine rescue; how to reduce the side effects of antibiotics and hormones; summarize and update the treatment plan of traditional Chinese medicine.



(五) 中医分期治疗

Treatment by stages of traditional Chinese medicine

1. 中医医学观察期（西医轻型）：疫毒袭肺

Observation period of traditional Chinese medicine (light western medicine): epidemic toxin attacking the lung

辩证要点 Dialectical points:

① 外邪初起侵犯肺卫，其寒热湿的表现多不明显，用药当轻灵疏透，忌过于苦寒温燥，反伤正气；

External evil invades Fei Wei at the beginning, and its cold, heat and dampness are not obvious. When medicine is used, it should be light and sparse, avoid being too bitter, warm and dry, and harm vital qi.

② 此时应预防为主，防治结合，防止病情发展。

At this time, we should give priority to prevention and combine prevention and treatment to prevent the development of the disease.

主症: 发病初期，发热或未发热，咽干咽痛，轻咳少痰，无汗，倦怠乏力，脘痞，便溏。舌淡红，苔薄白腻，脉濡。

Main symptoms: early onset, fever or no fever, dry pharynx and sore throat, light cough and less phlegm, no sweating, fatigue, epigastric ruffles, loose stool.

The tongue is light red, the moss is thin, white and greasy, and the pulse is weak.

治法: 疏风祛湿，佐以扶正。

Treatment: soothing the wind and dispelling dampness, accompanied by strengthening the body



(五) 中医分期治疗

Treatment by stages of traditional Chinese medicine

1. 中医医学观察期（西医轻型）：疫毒袭肺

Observation period of traditional Chinese medicine (light western medicine): epidemic toxin attacking the lung

推荐处方：荆防败毒散加减 Recommended prescription: Jingfang Baidu San plus or minus

荆芥10g 防风10g 羌活10g 苏叶10g

Jingjie10g Fangfeng10g Qianghuo10g Suye10g

苍术12g 陈皮10g 厚朴10g 草果6g

Cangzhu12g Chenpi10g Houpo10g Caoguo6g

紫草15g 连翘15g 射干9g 贯众10g

Zicao15g Lianqiao15g Shegan9g Guanzhong10g

藿香10g

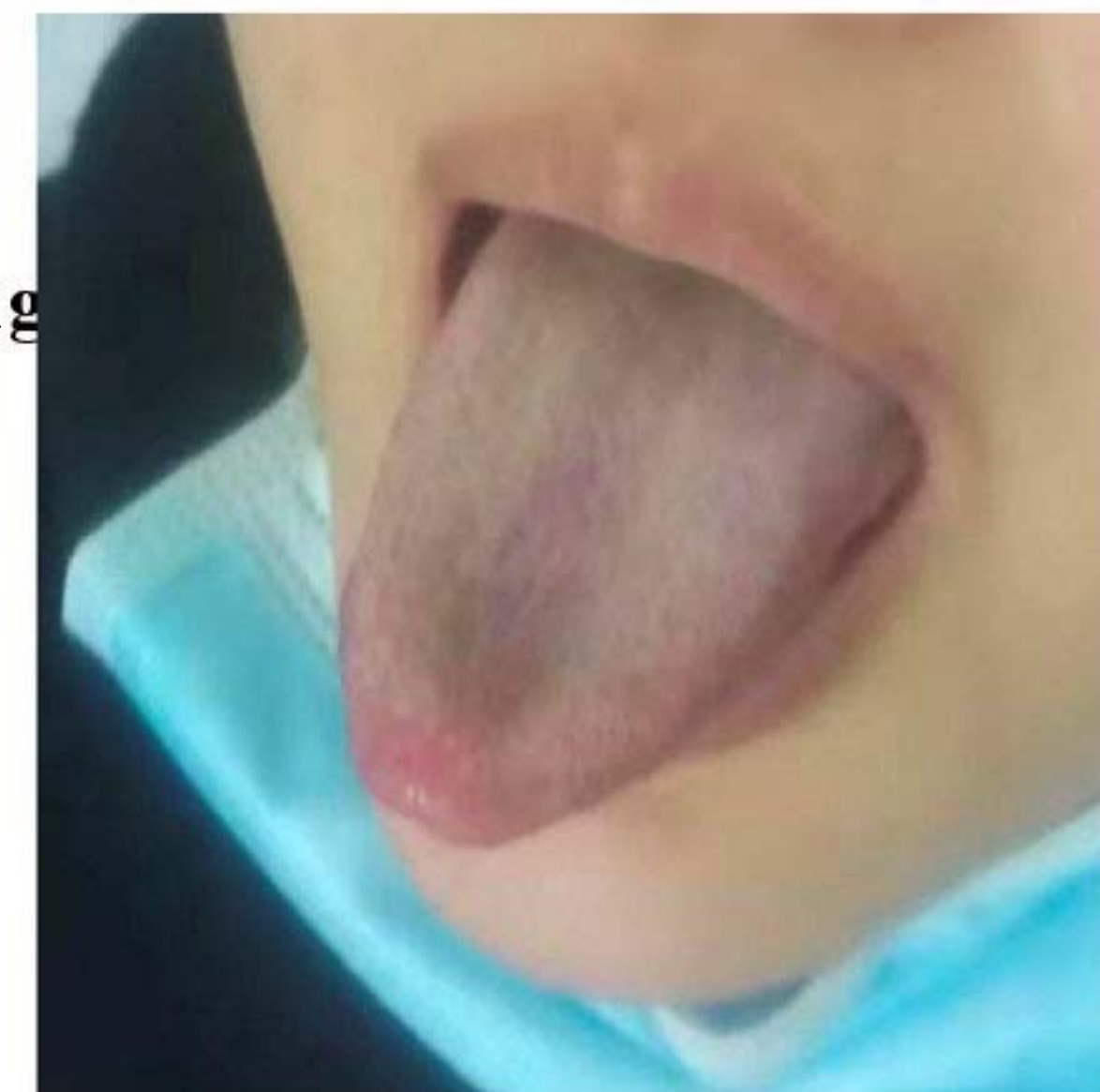
Huoxiang10g

加减：高热加青蒿30g；苔厚腻加佩兰10g，荷叶15g；咳嗽重加桔梗10g，炙枇杷叶10g；腹泻加黄连3g；恶心者加姜竹茹9g；胃肠不适腹泻者加佛手片12g，神曲15g。

Plus or minus: high fever plus Qinghao 30g, thick and greasy tongue plus Peilan 10g, Heye 15g, cough plus Jiegeng 10g, Zhipipaye 10g, diarrhea plus Huanglian 3g, nausea plus Jiangzhuru 9g, gastrointestinal discomfort and diarrhea plus Fushoupian 12g, Shenqu 15g.

北中医王琦院士在《新型冠状病毒肺炎中医诊疗手册》亦主张解表发散，扶正散邪。推荐使用葱豉汤合玉屏风散加味：葱白一根切段，豆豉10g，生黄芪9g，炒白术9g，防风9g，苏叶6g，金银花6g，牛蒡子9g。

Academician Wang Qi of Beijing Traditional Chinese Medical University also advocated relieving the surface and divergence, strengthening the body and dispelling evil in *COVID-19's Handbook of diagnosis and treatment of traditional Chinese Medicine*. It is recommended to use Congchi Tang combined with Yupingfeng San: Congbau, Douchi 10g, Shenghuangqi 9g, Chaobaizhu 9g, Fangfeng 9g, Suye 6g, Jinyinhua 6g, Niubangzi 9g.





(五) 中医分期治疗

1. 中医医学观察期（西医轻型）

对症治疗

- 临床表现1：乏力伴胃肠不适。纳差，便溏，恶心欲呕，有的还腹胀，有的疲乏，薄黄苔或黄腻苔。
- 推荐治法：藿香正气散、香苏饮加减，祛湿健脾，同时可选用手阳明大肠经、足阳明胃经的穴位进行推揉按摩，如合谷、曲池、梁丘、天枢、足三里等。
- 推荐中成药：藿香正气胶囊（丸、水、口服液）。



(五) 中医分期治疗

1. 中医医学观察期（西医轻型）

对症治疗

- 临床表现2：乏力伴低热。

推荐治法：酌情加用金银花、连翘、桑叶、葛根等药物以加强退热之力。可选用手太阴肺经、手阳明大肠经、督脉的穴位进行推揉按摩，如列缺、合谷、大椎、太阳、风池等。同时可以艾灸足三里增强机体正气以退邪。

推荐中成药：金花清感颗粒、连花清瘟胶囊（颗粒）、疏风解毒胶囊（颗粒）。



(五) 中医分期治疗

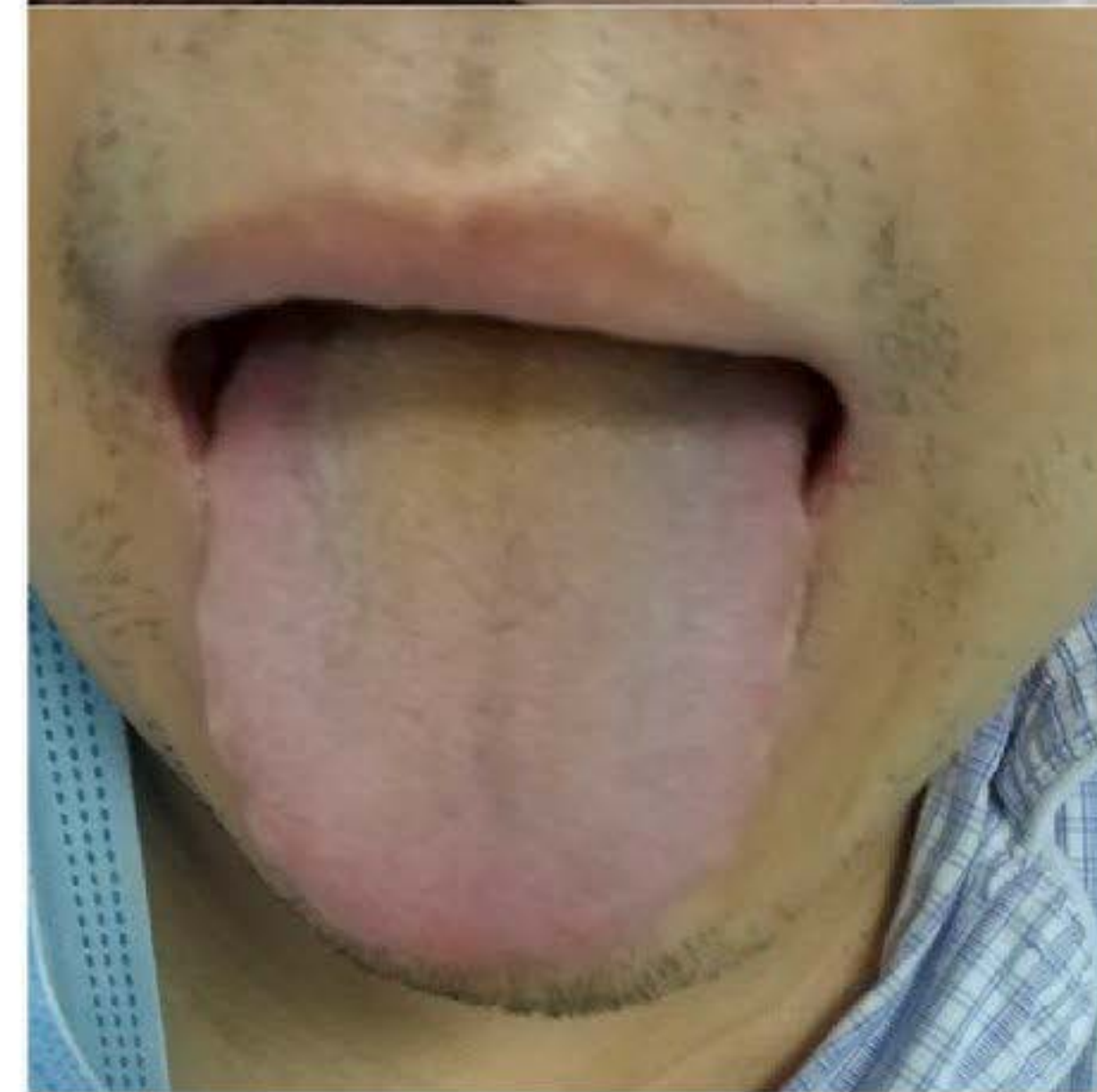
2. 临床治疗期之初期：疫毒郁肺（西医普通型）

辨治要点：

①疫毒袭肺不宜大剂量苦寒以免凉遏冰伏；患者常伴腹泻，亦不宜一派苦寒；

②湿邪阻滞不唯燥湿，尚可宣化湿邪，透邪外出，或通阳渗湿，湿热互结则清透并用。总之，湿邪重在施予出路，正如叶天士所说“或透风于热外，或渗湿于热下，不与热相搏，势必孤矣”。

主症：发病中期，发热或不发热，咳嗽痰少，或有黄痰，倦怠乏力，或有胸闷气稍促。舌质红，苔薄黄腻或黄腻或黄燥，脉滑数。





(五) 中医分期治疗

2. 临床治疗期之初期：疫毒郁肺（西医普通型）

- 治法：清热解毒，宣肺通腑
- 推荐处方：麻杏石甘汤合千金苇茎汤加减。

炙麻黄(ZhiGancao) 9g 杏仁(Xingren) 10g 生石膏(ShengShigao) 30g 先煎(Xianjian)

知母(Zhimu) 12g 土茯苓(TuFulin) 10g 芦根(Lugen) 30g (鲜芦根尤佳)

生米仁(ShengMiren) 30g 冬瓜仁(DongGuaren) 30g 桃仁(Taoren) 12g

野荞麦根(YeQiaomaigen) 30g 炒黄芩(ChaoHuangqin) 12g 桔梗(Jiegen) 9g

姜半夏(JiangBanxia) 9g 苏梗(Sugen) 12g 苏木(Sumu) 12g。





(五) 中医分期治疗

2. 临床治疗期之初期：疫毒郁肺（西医普通型）

对症治疗：

临床表现1：发热

- 发热为新型冠状病毒肺炎常见首发症状，约占98%。应用中药控制体温，清热透邪，清肃肺热，解肌定痛。
- 早期以发热为主，一般5~7天，此时病毒盛而正不弱，是转折的关键时刻。如中药早期控制，可直接进入恢复期。
- 临床可以在辨证选方的基础上，酌情加用柴胡、葛根、金银花、连翘、葱白、豆豉等药物，以加强退热之功。同时可选用手太阴肺经、手阳明大肠经、督脉的穴位进行推揉按摩，如列缺、合谷、大椎，以及足少阳胆经的风池穴、经外奇穴太阳穴。

(五) 中医分期治疗

(No.5) TCM staged treatment



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2. 临床治疗期之初期：疫毒郁肺（西医普通型）

2. Early in the clinical treatment period: Epidemic toxin stagnates the lung (Common type of western medicine)

对症治疗：Symptomatic treatment:

临床表现2：咳嗽 **Clinical manifestation 2: Cough**

咳嗽为除发热外最常见症状，约占76%，多为“干咳”，无痰，或少量白痰，或少数病人痰中带有血丝。临床可以在辨证选方的基础上，酌情加用杏仁、桔梗、前胡、紫菀、当归等，以加强止咳之功。同时可选用手太阴肺经穴位进行推揉按摩，如鱼际、尺泽、孔最等。

Cough is the most common symptom except fever, accounting for about 76%, mostly "Dry cough", no sputum, or a small amount of white sputum, or a few patients with bloodshot sputum. Clinically, on the basis of syndrome differentiation, Xingren, Jiegeng, Qianhu, Ziwan, Danggui can be added as appropriate to strengthen the antitussive effect. At the same time, you can choose hand Taiyin lung meridian acupoints for massage, such as Yuji, Chize, Kongzui and so on.



(五) 中医分期治疗

(No.5) TCM staged treatment

2. 临床治疗期之初期：疫毒郁肺（西医普通型）

2. Early in the clinical treatment period: Epidemic toxin stagnates the lung (Common type of western medicine)

对症治疗：Symptomatic treatment:

临床表现3：肌肉疼痛或乏力 Clinical manifestation 3: muscle pain or fatigue

肌肉疼痛或乏力，约占44%。临床可以在辨证选方的基础上，酌情加用羌活、葛根、防风等药物，以加强解肌之功。

Muscle pain or fatigue accounted for about 44%. Clinically, on the basis of syndrome differentiation and prescription selection, Qianghuo, Gegen, Fangfeng and other drugs can be added as appropriate to strengthen the function of relieving muscle.

(五) 中医分期治疗

(No.5) TCM staged treatment

2. 临床治疗期之中期：疫毒闭肺（西医重型）

2. In the middle of clinical treatment period: Epidemic toxin closes the lungs (Severe western medicine)

辩证要点： **Dialectical points:**

① 瘟疫热毒至深，里热愈炽，此时应在此前泻热透邪的基础上，内外分消其势。

① The plague fever is deep, and the inside heat is getting hotter. At this time, the potential should be eliminated internally and externally based on the previous heat-relief.



(五) 中医分期治疗

(No.5) TCM staged treatment



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2. 临床治疗期之中期：疫毒闭肺（西医重型）

2. In the middle of clinical treatment period: Epidemic toxin closes the lungs (Severe western medicine)

辨证要点： Dialectical points:

②同为高热，有辨证之异：热毒火邪郁结上焦，气热烁津，清上泻下；热与湿结，湿热并重，利湿化浊；邪毒闭肺，热结肠燥，通腑泻热；疫毒炽盛，高热神昏，清热安神。

②The same is high fever, there are dialectical differences: heat poison fire evil stagnation on coke, qi-heat Shuojin, clear upper diarrhea; heat and dampness knot, dampness and turbid; evil toxin closes the lungs, heat-colon dryness, purging heat; epidemic poison is blazing, high fever is dizzy, clearing heat and calming the mind.

③瘀毒互结，瘀毒同治。注意辨证用方。

③ The blood stasis and poison are mutually connected, and the blood stasis and poison are treated together. Pay attention to dialectical use.



(五) 中医分期治疗



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(No.5) TCM staged treatment

2. 临床治疗期之中期：疫毒闭肺（西医重型）

• **2. In the middle of clinical treatment period:**

Epidemic toxin closes

• **the lungs (Severe western medicine)**

主症：胸闷气促，口唇紫绀，动辄气喘，烦躁，汗出肢冷，或伴心悸，心慌。舌质红绛或暗紫，苔黄腻或厚腻，脉滑数。

• **Main symptoms:** suppression in the chest and panting, cyanosis of lips, wheezing, asthma, cold sweating, or palpitation, nervousness. Bright red tongue or dull purple tongue, yellow or thick greasy fur, slippery and rapid pulse.



(五) 中医分期治疗

(No.5) TCM staged treatment

2. 临床治疗期之中期：疫毒闭肺（西医重型）

2. In the middle of clinical treatment period: Epidemic toxin closes the lungs (Severe western medicine)

推荐处方：葶苈泻肺汤加减。

Recommended prescription: Tingli xiefei decoction.

葶苈子15g 瓜蒌皮9g 野荞麦根30g 肺形草30g
炒黄芩30g 苏子9g 薤白头12g 姜半夏12g
桂枝9g 生白芍15g 川芎15g 白芥子9g。

TingLizi 15g GuaLoupi 9g YeQiaomaigen 30g FeiXingcao 30g

Chao Huangqin 30g Suzi 9g XieBaitou 12g JiangBanxia 12g

Guizhi 9g ShengBaishao 15g Chuanxiong 15g BaiJiezi 9g.

推荐中成药：喜炎平注射剂、血必净注射剂。

Recommended proprietary Chinese medicines: Xiyanping injection and Xuebijing injection.



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(五) 中医分期治疗 (Traditional Chinese medicine treatment by stages)



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2. 临床治疗期之中期：疫毒闭肺（西医重型）

In the middle of the clinical treatment period: the epidemic toxin closes the lung (severe type of western medicine)

对症治疗 (Symptomatic treatment):

- **高热不解**，加用人参白虎汤，生晒参4-6g，生石膏30-60g，知母12g；同时可以使用酒精棉球擦拭穴位，如大椎、合谷、风池、曲池等。
- **High fever and incomprehension**, plus Renshen Baihu decoction, ShengShaishen 4-6g, ShengShigao 30-60g, Zhimu 12g; at the same time, alcohol cotton balls can be used to wipe acupoints, such as Dazhui, Hegu, Fengchi, Quchi and so on.
- 皮肤出现**紫斑**，加水牛角15-30g，丹皮15-30g，生地(或生地炭)30g，银花(或银花炭)30g;
- **Purple spots** on the skin, add ShuiNiujiiao 15-30g, Danpi 15- 30g, Shengdi (or ShengDitan) 30g, Yinhua (or YinHuatan) 30g;



- 心悸怔忡或胸闷、水肿，加用茶树根30g，玉米须30g。酌情选用瓜蒌、薤白、郁金、炒枳壳等药物，疏通气机。同时可以按摩内关、膻中、天池、天泉等穴位。
- **Palpitation and severe palpitation or chest distress, edema**, plus ChaShugen 30g, YuMixu 30g. Choose Gualou, Xiebai, Yujin, ChaoZhiqiao and other drugs as appropriate to dredge qi. At the same time, you can massage Neiguan, Danzhong, Tianchi, Tianquan and other acupoints.
- 气喘，酌情选用桑白皮、黄芩、地龙等清热平喘药物，改善呼吸功能。同时可以按摩肺俞、定喘、膻中、喘点(耳穴)等穴位。
- **Asthma**, as appropriate, choose SangBaipi, Huangqin, Dilong and other heat-clearing and antiasthmatic drugs to improve respiratory function. At the same time, you can massage Feishu, Dingchuan, Luzhong, Asthma points (auricular points) and other acupoints.

(五) 中医分期治疗 (Traditional Chinese medicine treatment by stages)



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2. 临床治疗期之重症期：疫毒闭肺（西医危重期）

Severe stage of clinical treatment: epidemic toxin closes the lungs (critical stage of western medicine)

• **辨治要点 (Key points of differential diagnosis and treatment):**

① 见微知著，及早防变，注意神志、脉象情况动态改变，防止危急重症的发生。

Be aware of it, prevent change as soon as possible, and pay attention to the dynamic changes of consciousness and pulse condition, so as to prevent the occurrence of critical illness.

② 急则治标，中西医方法结合使用，以挽救患者生命为先。

If it is urgent, the symptoms should be cured, and the combination of traditional Chinese and western medicine should be used to save the lives of patients first.



- **主症：**神志昏蒙、淡漠，口唇爪甲紫暗，呼吸浅促，咯粉红色血痰，四肢厥冷，汗出，尿少。舌红绛或暗淡，脉沉细数。
- **Main symptoms:** dim consciousness, indifference, dark purple nails of lips and claws, shallow shortness of breath, pink blood sputum, cold limbs, sweating, little urine. The tongue is red or dim, and the pulse is heavy and thin.
- **推荐处方：**参附汤加減。生晒参30g或野山参10g，西洋参15g，炮附子^{先煎}15g
- **Recommended prescription:** **add or subtract ginseng and aconite decoction.** ShengShaishen 30g or YeShanshen 10g, XiYangshen 15g, PaoFu^{zhi} ^{Xianjian} 15g
- **用法：**可采用鼻饲，或一半鼻饲一半高位灌肠，每日分4-6次给予。
- **Usage:** nasal feeding can be used, or half nasal feeding and half high enema, given 4-6 times a day.
- **推荐中成药：**血必净注射液、参附注射液、生脉注射液。
- **Recommended proprietary Chinese medicine:** Xuebijing injection, Shenfu injection, Shengmai injection.

(五) 中医分期治疗 (Traditional Chinese medicine treatment by stages)



2. 临床治疗期之重症期：疫毒闭肺（西医危重期）

Severe stage of clinical treatment: epidemic toxin blocking the lungs (critical stage of western medicine)

对症治疗 (Symptomatic treatment)

- 闭证，有神昏谵语者：可予苏合香丸或安宫牛黄丸灌服。
- blockage syndrome, there is coma and delirium: can be given Suhe Xiang pills or Angong Niu Huang pills.
- 呼吸困难：在辨证选方的基础上，注意气阴两顾、收敛固脱，同时补中有通、兼以活血，酌情加用人参或西洋参（独参汤）、山萸肉、炙麻黄、地龙、丹参等药物改善呼吸困难，并可佐用艾灸神阙、关元的方法提升正气。
- **Dyspnea:** on the basis of syndrome differentiation, pay attention to both qi and yin, converge and remove, at the same time, tonify and activate blood, as appropriate, add Renshen or XiYangshen (Dushen decoction), ShanYurou, ZhiMahuang, Dilong, Danshen and other drugs to improve dyspnea, and moxibustion Shenque, Guanyuan can be used to improve vital qi.

(五) 中医分期治疗 (Traditional Chinese medicine treatment by stages)



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2. 临床治疗期之重症期：疫毒闭肺（西医危重期）

Severe stage of clinical treatment: epidemic toxin blocking the lungs (critical stage of western medicine)

对症治疗 (Symptomatic treatment)

- **肺间质病变：**中医宜较早运用，阻止肺间质病变的形成。疫毒侵肺，肺气壅遏。若出现吸入困难，呼吸浅短难续，或气血运行不畅，心脉瘀阻即出现呼吸喘满，紫绀等，属本虚标实，是肺间质纤维化的晚期阶段，则治疗较为困难。临床可以在辨证选方的基础上，酌情加用地龙、皂角刺、消瘰丸(玄参、生牡蛎、浙贝母)等药物化痰活血通络，以阻止肺间质病变的发生及发展。
- **Pulmonary interstitial lesions:** traditional Chinese medicine should be used earlier to prevent the formation of pulmonary interstitial lesions. The epidemic virus invades the lungs, and the lungs are choked up. If there is difficulty in inhalation, shallow and short breathing, or poor operation of qi and blood, heart stasis, that is, respiratory fullness, cyanosis, etc., which belongs to the original deficiency and excess, and is the late stage of pulmonary interstitial fibrosis, then the treatment is more difficult. In clinic, on the basis of syndrome differentiation and prescription selection, drugs such as Dilong, Zaojiaoci, Xiaoji pills (Xuanshen, ShengMuli, ZheBeimu) can be used to resolve phlegm, promote blood circulation and dredge collaterals, so as to prevent the occurrence and development of pulmonary interstitial disease.

(五) 中医分期治疗 (Traditional Chinese medicine treatment by stages)



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2. 临床治疗期：国家卫健委推荐的清肺排毒汤的使用

Clinical treatment period: the use of Qingfei Paidu decoction recommended by the National Health Commission

适用于轻型、普通型、重型患者，在危重型患者救治中可结合患者实际情况合理使用。

It is suitable for light, ordinary and severe patients, and can be used reasonably according to the actual situation in the treatment of critical patients.

麻黄(Mahuang)9g	炙甘草(ZhiGancao)6g	杏仁(Xingren)9g	生石膏(ShengShigao)15-30g(先煎)(Xianjian)
桂枝(Guizhi)9g	泽泻(Zexie)9g	猪苓(Zhuling)9g	白术(Baizhu)9g
茯苓(Fuling)15g	柴胡(Chaihu)16g	黄芩(Huangqin)6g	姜半夏(JiangBanxia)9g
生姜(Shengjiang)9g	紫菀(Ziwan)9g	冬花(Donghua)9g	射干(Shegan)9g
细辛(Xixin)6g	山药(Shanyao)12g	枳实(Zhishi)6g	陈皮(Chenpi)6g
藿香(Huoxiang)9g			



传统中药饮片，水煎服。每天一付，早晚两次(饭后四十分钟)，温服，三付一个疗程。

Traditional Chinese medicine decoction pieces, water frying service. One payment a day, twice in the morning and evening (40 minutes after meals), warm service, three for a course of treatment.

如有条件，每次服完药可加服大米汤半碗，舌干津液亏虚者可多服至一碗。(注：如患者不发热则生石膏的用量要小，发热或壮热可加大生石膏用量)。若症状好转而未痊愈则服用第二个疗程，若患者有特殊情况或其他基础病，第二疗程可以根据实际情况修改处方，症状消失则停药。

If there are conditions, you can add half a bowl of rice soup after taking the medicine, and those with dry tongue and body fluid can take more than one bowl. (note: if the patient does not have a fever, the amount of ShengShigao should be small, fever or strong fever can increase the amount of raw gypsum. If the symptoms improve and are not cured, take the second course of treatment. If the patient has special conditions or other basic diseases, the prescription can be changed according to the actual situation. If the symptoms disappear, the drug will be stopped.

(五) 中医分期治疗

(No.5) TCM staged treatment



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2. 临床治疗期之恢复期：肺脾两虚，气阴两虚

2. Recovery period of clinical treatment: Deficiency of Both Lung and Spleen, deficiency of both qi and yin

辨治要点：①气阴两补，肺脾同调；②扶正为主，兼顾余邪。

The main points of differentiation and treatment are: ① Qi and Yin supplement, lung and spleen coherence; ② Strengthening the body resistance, and then eliminating pathogenic factors.

主症1：气短，倦怠乏力，胃纳欠佳，痞满，大便不畅。舌质偏红或淡胖，苔薄腻，脉细数或缓或弱。

Main symptoms 1: shortness of breath, fatigue, poor appetite, fullness, and poor stool. The tongue is reddish or fat, the fur is a little greasy, and the pulses are gradually or weakly.

(五) 中医分期治疗

(No.5) TCM staged treatment



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2. 临床治疗期之恢复期：肺脾两虚，气阴两虚

2. Recovery period of clinical treatment: Deficiency of Both Lung and Spleen, deficiency of both qi and yin

推荐处方1：香砂六君丸加減。 Recommended prescription 1: Xiangsha Liujun Pills.

党参12g 生黄芪20g 法半夏9g 陈皮6g

茯苓15g 生米仁30g 木香6g 砂仁5g

麦冬12g 丹皮10g 炙甘草6g

Dangshen 12g ShengHuangqi 20g FaBanxia 9g Chenpi 6g

Fulin 15g ShengMiren 30g Muxiang 6g Sharen 5g

Maidong 12g Danpi 10g ZhiGancao 6g

(注:轻重型恢复期转归不一，根据辨证，分辨阴阳气血五脏虚实立法处方)

(Note: The recovery period of light and heavy is different. According to the dialectical analysis, the legislative prescription of yin, yang, blood and five internal organs is deficient.

(五) 中医分期治疗

(No.5) TCM staged treatment



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2. 临床治疗期之恢复期：肺脾两虚，气阴两虚

2. Recovery period of clinical treatment: Deficiency of Both Lung and Spleen, deficiency of both qi and yin

辨治要点：①气阴两补，肺脾同调；②扶正为主，兼顾余邪。

The main points of differentiation and treatment are: ① Qi and Yin supplement, lung and spleen coherence; ② Strengthening the body resistance, and then eliminating pathogenic factors.

主症2：热退乏力，气短汗出，唇干纳差，苔少或苔薄少津，脉细或细数。

Main symptoms 2: heat retrograded and fatigue, shortness of breath and sweating, poor dry lips and poor appetite, short fur or thin fur with less fluid, thready pulse or thready and rapid pulse.

(五) 中医分期治疗

(No.5) TCM staged treatment

推荐处方2：百合固金汤、清燥养荣汤加味。

Recommended prescription 2: Baihe Gujin Decoction, Qingzao Yangrong Decoction.

百合 15g 麦冬 10g 贝母 10g 玄参 10g 桔梗 6g,

甘草 6g 白芍 10g 当归 10g 生地黄 10g 熟地黄 10g,

知母 6g 天花粉 15g 陈皮 10g 麦芽 10g 佩兰 10g。

Baihe 15g Maidong 10g Beimu 10g Xuanshen 10g Jiegeng 6g

Gancao 6g Baishao 10g Danggui 10g ShengDihuang 10g ShuDihuang 10g,

Zhimu 6g TianHuafen 15g Chenpi 10g Maiya 10g Peilan 10g.

(注:轻重型恢复期转归不一, 根据辨证, 分辨阴阳气血五脏虚实立法处方)

(Note: The recovery period of light and heavy is different. According to the dialectical analysis, the legislative prescription of yin, yang, blood and five internal organs is deficient.

(六) 预后:

(6) Prognosis:



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1、目前，多数预后良好，少数患者病情危重。老年人和有慢性基础疾病者预后较差。儿童病例症状相对较轻。

1. At present, most patients have a good prognosis, and a few patients are critically ill. The prognosis for the elderly and those with chronic underlying disease is poor. Symptoms in children are relatively mild.

2、由于目前尚不清楚感染的实际病例数量及其病程，因此还没有确切的病死率估算。

2. As the actual number of infections and their duration are unknown, there is no precise estimate of mortality.

3、MERS病死率约为37%，SARS则约为10%。

3. The mortality rate of MERS is about 37%, and SARS is about 10%.



(六) 预后 Prognosis :

4、中医预后 Prognosis of traditional Chinese medicine.

(1) 肺脾两虚者易发展为重症 Deficiency of both lung and spleen are easy to develop into severe cases.

- 我们在临床发现，重症肺炎患者多有咳嗽声低，气短而喘，腹胀，便溏，舌体胖大，舌苔厚腻，甚至腐苔，脉弱等证候，表现出明显的脾肺两虚、湿毒内陷的证候。
- In clinic, we found that most of the patients with severe pneumonia had cough, shortness of breath, dyspnea, abdominal distension, loose stool, fat tongue, thick and greasy tongue coating, even curdy fur, weak pulse and other syndromes, showing obvious syndrome of deficiency of both lung and spleen and invagination of toxic dampness.



(六) 预后 Prognosis :

4、中医预后 Prognosis of traditional Chinese medicine.

- 《温病条辨·上焦》11条自注：“化源绝，乃温病第一死法也……按温病死状百端，大纲不越五条。在上焦有二：一曰肺之化源绝者死……”其人平素肺气、肺阴亏虚，感受疫毒邪气，则易有化源绝之虞。脾肺两虚则运化失职，水湿停聚，此时若感受寒湿疫毒，疫毒进一步损伤脾肺，正气虚衰，不能驱邪外出，病情迅速发展，致邪毒内陷，湿毒郁肺，预后不良。
- There are 11 self-notes on " *Item Differentiation of Warm Febrile Diseases* ": "*when the vital genesis was absolute, and it is the first cause of death of febrile disease.*". According to the death of febrile disease, there are no more than five outlines. *There are two things in upper warmer: one is when the vital genesis was absolute, he would die.* " If the person usually suffers from deficiency of lung qi and lung yin and epidemic toxin infection, he is in danger of becoming extinct. Deficiency of the spleen and lung leads to dereliction of duty, water-dampness stops gathering, at this time, if you feel the cold-damp epidemic toxin, the epidemic toxin would further damages the spleen and lung, the deficiency of vital qi decays, and it cannot drive away stagnated exogenous pathogen, then the disease develops rapidly, causing evil toxin invagination, noxious dampness in the lung, and poor prognosis.



(六) 预后

(2) 肾虚者预后较差

- 临床上以年长患者为代表的肾虚者往往感染后病情较重，可能与其“肾精亏虚”的生理特点相关。
- 温病大家柳宝诒《温热逢源》提出：“寒邪之内伏者，必因肾气之虚而入，故其伏也，每在少阴。”“即如伏气发温之病，惟冬伤于寒故病温，惟冬不藏精故受寒。其所受之寒，无不伏于少阴……其肾气未至大虚者，倘能鼓邪外达，则由少阴而达太阳，病势浅而轻。若肾虚不能托邪，则伏于脏而不得外出，病即深而重。”老年人等肾精亏虚者，当冬季寒邪最盛之时，新冠病毒等疫疠之邪更易于潜伏体内，在此期间，疫疠之气进而伤及正气，或正气难以抵抗疫疠之气，则疾病发生。

(六) 预后



(2) 肾虚者预后较差 The prognosis of patients with kidney deficiency patients is poor

- 中医学有“肺肾相生”学说。肺司呼吸，肾主纳气。人体的呼吸运动，虽然由肺所主，但需要肾的纳气作用来协助。肺肾相互配合，共同完成呼吸的生理活动。所以说“肺为气之主，肾为气之根”。因此，疫疠之气日久也可经过肺之肃降，而下纳于肾。肺肾阴液之间也是相互资生的。
- Traditional Chinese medicine has the theory of "mutual generation between lung and kidney". Lung controlling respiration, and the kidney regulates inspiration. Although the breathing movement of the human body is dominated by the lungs, it needs the assistance of the kidney to absorb qi. The lungs and kidneys cooperate with each other to complete the physiological activities of breathing. Therefore, it is said that "*the lung is the master of qi and the kidney is the root of qi.*" Therefore, the plague can also be purged by the lungs for a long time, and it can be accepted in the kidney. The Yin fluid of lung and kidney is also born with each other.

(六) 预后



(2) 肾虚者预后较差 The prognosis of patients with kidney deficiency patients is poor

- 肺属金，肾属水，金能生水，肺阴充足，输精于肾，使肾阴充盛，保证肾的功能旺盛。水能润金，肾阴为一身阴液之根本，肾精充足，循经而上润于肺，保证肺气清宁，宣降正常。故《医医偶录》指出：“肺气之衰旺，全恃肾水充足，不使虚火炼金，则长保清宁之体。”
- 疫疠之气为阳邪，伏藏或储藏于肾，直接损伤肾阴，或肺阴损伤日久耗伤肾阴，都可以加剧肾精亏虚，进一步导致肺肾阴亏，**这种情况下的肾虚者COVID-19往往起病较重，发展迅速，出现气喘、呼吸急促、潮热盗汗等症状。**
- Lung belongs to gold, kidney belongs to water, gold can produce water, lung yin is sufficient, insemination in the kidney, so that the kidney yin is full, to ensure the exuberant function of the kidney. Water can moisten gold, kidney yin is the foundation of yin fluid, kidney essence is sufficient, moistens the lungs along the meridian, ensures that lung qi is clear and peaceful, and declares and descends normally. Therefore, the "yi yi ou lu" points out: *"the depurative down-bearing of lung qi depends on the adequacy of kidney water, and if we do not make deficiency fire to make gold, then we will keep the body of health for a long time."*
- Epidemic disease or pestilence is yang pathogens, which is stored in the kidney, directly injuring kidney yin, or lung yin injury damaging kidney yin for a long time, which can aggravate kidney essence deficiency and further lead to lung and kidney yin deficiency. **In this case, COVID-19 in patients with kidney deficiency often has severe onset and rapid development, with symptoms such as asthma, tachypnea, hot flushes and night sweats.**

(七) 病案 case



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患者，女，30岁，因“发热14天，咳嗽12天”于2020年1月29日收住入院，患者14天前无明显诱因下出现发热，伴流涕。2天后出现咳嗽咽痒，咳痰量少。2020年1月25日查胸部CT示：两下肺感染。2020年1月29日浙江省疾控报告新型冠状病毒核酸检测阳性，遂收治入院。

入院查体：体温36.3℃，心率96次/分，呼吸18次/分，血压115/70mmHg，神情，咽充血，双肺听诊呼吸音粗，未闻及干湿啰音。辅助检查：白细胞 $6.27 \times 10^9/L$ ，中性粒细胞 $3.71 \times 10^9/L$ ，淋巴细胞 $2.17 \times 10^9/L$ ，二氧化碳分压45.4mmHg，氧分压123.0mmHg，谷丙转氨酶24U/L，谷草转氨酶27U/L，肌酐 $52 \mu\text{mol}/L$ ，肺部CT检查显示：右肺上叶及两肺下叶胸膜下可见多发小斑片状及结节状影。结合新型冠状病毒核酸检测结果，初步诊断：新型冠状病毒肺炎（确诊）。

2月1日患者咳嗽加重，咳痰量少，并伴有腹泻。复查血象：白细胞 $6.42 \times 10^9/L$ ，中性粒细胞 $4.87 \times 10^9/L$ ，淋巴细胞 $1.09 \times 10^9/L$ ，嗜酸性粒细胞 $0.01 \times 10^9/L$ ，血清白蛋白38.7g/L，总胆红素 $27.05 \mu\text{mol}/L$ 。未见明显好转，遂请中医会诊治疗。

2月1日中医首诊，刻下：体温：37.0℃，咳嗽咳痰，痰白质粘，量少，头晕，活动后感乏力，呕恶纳呆，口干不欲饮水，日腹泻1-2次，舌淡红苔薄黄腻，脉濡。中医诊断：疫病。辨证：湿郁肺脾，湿重于热。治法：宣肺透邪，运脾化湿。方药：麻黄6g，苦杏仁9g，炒苍术10g，厚朴9g，姜半夏9g，滑石15g，萆薢12g，芦根15g，蝉蜕6g，生甘草3g。2剂，分早晚两次温服。西药治疗同前。当日19时53分查房，患者服药后咳嗽减轻，续观。



(七) 病案case

2月3日二诊：体温：36.7℃，咳嗽较前减轻，仍然咳少许白粘痰，口不干，已无呕恶，腹泻1-2次/日，舌淡红，苔薄白微腻，边有齿痕，脉濡。前方去芦根，加薏苡仁30g。3剂，分早晚两次温服。2月4日复查血：血常规已处于正常范围，血清白蛋白38.2g/L。

2月6日三诊：体温：37.4℃，偶有咳嗽，咳少量黄粘痰，腹泻1次/日，寐纳可，舌淡红苔薄白，边有齿痕，脉濡。肺部CT示：两肺散在少许炎性灶，较前片部分吸收。续守上方。

2月9日四诊：体温：36.9℃，偶有干咳，稍有乏力，饮食正常，二便调，舌淡红苔薄白，脉微弦。续服二诊方3剂。患者2月10日和2月12日连续两次新冠病毒核酸检测阴性，呼吸道症状消失，血象正常，肺部CT显示炎症吸收，符合出院标准。

按：患者入院时无发热，主症为咳嗽咳痰，并有乏力纳呆，腹泻等脾虚湿困之证，辨证为湿郁肺脾，湿重于热。故以麻黄开宣肺气，与杏仁宣降相伍，止咳兼开湿浊之去路；苍术、厚朴、半夏、萆薢燥肺脾之湿；芦根、滑石清热生津，既病防变；蝉蜕利咽透邪；生甘草清热解毒兼调和诸药，诸药合用，共奏宣肺透邪，运脾化湿之功。二诊时患者口干已减，腹泻仍作，故去芦根，加薏苡仁增强健脾止泻之力。



小 结

◆学好中医经典

Learn the classics of traditional Chinese medicine well

◆融合现代科技

Integration of modern science and technology

◆早临床、多临床、多接触案例

Early clinical, multi-clinical, multi-contact cases

◆每次抗击疫情，医学随之进步

Every time the epidemic is fought, medicine advances with it.

◆了解疫情，积极防治，不恐慌不莽撞

Understand the epidemic situation, actively prevent and control it, and do not panic or be reckless.