

## · 研究报道 ·

## 海南省107岁高龄奥密克戎变异株BA.5.1.3感染新型冠状病毒肺炎1例

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**摘要:** 目的 总结1例海南高龄感染新型冠状病毒奥密克戎变异株BA.5.1.3的新型冠状病毒肺炎(简称新冠肺炎)患者的临床特征和诊疗经验。方法 回顾分析2022年8月15日海口定点医院收治的1例高龄新冠病毒Omicron变异株BA.5.1.3感染患者的临床资料及治疗经过。结果 患者女性,107岁,因“发热、咳嗽1 d”入院。其2位家属感染新冠病毒。患者病初出现发热,伴咳嗽、咳痰,咳少许白色粘痰,伴咽痛、肌肉酸痛、乏力。咽拭子核酸检测阳性,为Omicron变异株BA.5.1.3感染。确诊为新型冠状病毒肺炎轻型,给予抗病毒、中药调理、抗凝、调节电解质紊乱及对症等治疗9 d,患者临床症状缓解,2次核酸检测阴性后治愈出院。1周后随访患者恢复情况良好。结论 Omicron变异株BA.5.1.3感染的新冠肺炎的传染性强,给予抗病毒、中药调理等综合治疗取得较好的疗效。对于高龄患者,要注意维持各器官功能和内环境稳定,有助于改善患者预后。

**关键词:** 新型冠状病毒肺炎;高龄;Omicron;抗病毒

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### A case of a 107-year-old elderly COVID-19 patient infected with Omicron variant BA.5.1.3 in Hainan

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**Abstract:** Objective This article summarizes the clinical characteristics and diagnosis and treatment experience of an elderly patient infected with Omicron variant BA.5.1.3 of COVID-19 in Hainan Province. Methods The clinical data and treatment of an elderly patient infected with Omicron variant BA.5.1.3 of COVID-19 admitted to Haikou designated hospital on August 15, 2022 were retrospectively analyzed. Results A 107-year-old female patient was admitted to the hospital with “fever and cough for 1 day”. Two of her family members have infected with COVID-19. The patient initially developed fever, accompanied by cough, expectoration, a little white sticky sputum, accompanied by sore throat, muscle pain, fatigue. Nucleic acid test was positive in throat swab, indicating Omicron variant BA.5.1.3 infection. The patient was diagnosed as mild COVID-19 and treated with antiviral therapy, Chinese medicine conditioning, anticoagulation, electrolyte disorder regulation and symptomatic treatment for 9 days. The patient’s clinical symptoms were relieved, and she was cured and discharged after two negative nucleic acid tests. One week later, the patient recovered well. Conclusions Omicron variant BA.5.1.3 is highly infectious, and comprehensive treatment such as antiviral treatment and traditional Chinese medicine treatment has achieved good efficacy. For elderly patients, attention should be paid to maintaining the stability of organ function and internal environment, which is helpful to improve the prognosis of patients.

**Keywords:** Coronavirus disease 2019; elderly; Omicron; anti-virus therapy

新型冠状病毒肺炎(coronavirus disease 2019, COVID-19, 简称新冠肺炎)是由新型冠状病毒(severe

acute respiratory syndrome coronavirus 2, SARS-CoV-2)感染所致,具有传染性强,易聚集性发病等特点。

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人群普遍对SARS-CoV-2易感,其中重型/危重型新冠肺炎患者中老年人居多<sup>[1]</sup>。大于60岁是新冠肺炎由轻型向重型/危重型转化的重要危险因素之一,且60岁以上的老年人病死率高达81%<sup>[2]</sup>。2022年8月,海南省暴发Omicron变异株BA.5.1.3感染为主的新冠疫情,为国内首次检出。目前有关高龄Omicron变异株BA.5.1.3感染的新冠肺炎的病例少有报道。现对海口市人民医院收治的海南高龄新型冠状病毒肺炎1例诊治经过报道如下。

## 1 临床资料

1.1 病例概况 患者,女性,107岁,2022年8月14日因“发热、咳嗽1 d”入院。患者1 d前无明显诱因出现发热(体温不详),伴咳嗽、咳痰,咳少许白色粘痰,伴咽痛、肌肉酸痛、乏力,无鼻塞、流涕,无嗅觉、味觉减退,无腹痛、腹泻,无胸闷、气促,无畏寒、寒战、头晕、头痛。于当天行咽拭子新冠病毒核酸检测,结果为阳性,诊断为新型冠状病毒肺炎(轻型)。患者从三亚转运至海口方舱医院,因其高龄,病情可能随时加重,遂于2022年8月15日晚上转运至海口片区新冠肺炎治疗定点医院,由我院专家团队进行救治。本研究经医院伦理委员会审查通过,伦理审查号:2022-(伦审)-335。

既往史、个人史及家族史无特殊。

1.2 流行病学史 患者为海南省三亚市人,目前长期居住三亚,于2022年8月7日因其孙子新冠病毒核酸阳性被送往当地酒店隔离,患者及其孙媳妇新冠病毒核酸均阳性。患者未接种新冠疫苗。

1.3 入院查体 体温T 36.6 ℃,脉搏P 105次/min,呼吸R 20次/min,血压BP 132/62 mmHg,末梢血氧饱和度:97%。神志清,口唇无发绀,咽无充血,因穿戴防

护用品,心肺无法听诊,腹平软,全腹无压痛及反跳痛,肝、脾肋下未触及,双下肢无水肿,四肢肌力5级,肌张力正常。

### 1.4 辅助检查

1.4.1 病原学检查 2022年8月14日咽拭子新型冠状病毒核酸阳性。8月19日新冠病毒鼻咽拭子核酸(上海伯杰),ORF1ab基因:阳性(26.09),N基因:阳性(26.02)。8月22、23日咽拭子新型冠状病毒核酸(上海伯杰)均阴性(间隔>24 h)。

1.4.2 其他检查 血气分析结果:pH 7.37, PO<sub>2</sub> 80.8 mmHg, PCO<sub>2</sub> 25.7 mmHg, HCO<sub>3</sub><sup>-</sup> 20.2 mmol/L, BE 5.1 mmol/L, 乳酸 2.6 mmol/L。电解质:钾 3.1 mmol/L, 钠 129.6 mmol/L, 氯 9.4 mmol/L。D-二聚体 1.93 mg/L。PCT 0.37 ng/mL。肾功能:肌酐 91 μmol/L。血常规、CRP、肝功能、凝血功能、心肌酶、血糖、血脂均未见异常。8月19日胸部CT平扫:双肺少许索条灶(图1)。8月21日复查电解质六项正常。

1.5 诊疗经过及随访情况 入院后诊断新型冠状病毒肺炎(轻型,Omicron变异株BA.5.1.3感染);中医诊断:疫病-轻症,湿热蕴肺证,给予莫那匹韦片0.8 g每天2次口服及重组人干扰素α2b喷雾剂1喷,每天4次喷喉抗病毒,中药汤剂口服(达原饮加减:草果10 g、厚朴10 g、知母10 g、黄芩10 g、北柴胡10 g、连翘15 g、苍术10 g、大青叶10 g、甘草5 g、地榆20 g、荷叶20 g、牛蒡子10 g),依诺肝素2 000 IU每天1次皮下注射抗凝及补液、纠正电解质紊乱等对症支持治疗。患者临床症状缓解,连续2次间隔24 h以上新型冠状病毒核酸检测阴性,于2022年8月24日办理出院。出院1周后电话随访,患者精神、食欲可,无发热、咳嗽等不适。



胸部CT平扫:双肺少许索条灶。Chest CT plain scan: a few cable foci in both lungs.

图1 患者影像学表现

Fig. 1 Imaging finding of the patients

## 2 讨 论

当前,COVID-19疫情仍在世界范围内持续流行。奥密克戎(Omicron)变异株已成为新冠病毒在全球的主要流行毒株,且该变异株的传染速度明显快于德尔塔毒株<sup>[3-4]</sup>。自2021年11月新型冠状病毒Omicron变异株出现以来,已在全球170多个国家间发生传播<sup>[5]</sup>。我国自2022年1月以来,天津、广东以及上海等多个省市也相继暴发奥密克戎本土疫情。海南2022年8月爆发我国第3轮新冠肺炎严重疫情,而且为Omicron变异株BA.5.1.3感染。该变异株为我国首次检出,对其特点的了解仍不深入。Omicron变异株BA.5较之前的Omicron毒株传播能力更强、传播速度更快,存在更强的传染性和免疫逃逸。

新冠肺炎潜伏期1~14 d,多为3~7 d,以发热、干咳、乏力为主要表现,部分患者可能出现咽痛、嗅觉味觉减退、肌痛、腹泻等表现。重症患者多在发病1周后出现呼吸困难和(或)低氧血症,严重可进展为急性呼吸窘迫综合征、脓毒性休克、严重代谢性酸中毒、多器官功能衰竭等<sup>[6]</sup>。该患者长期居住在三亚市,有接触新冠肺炎患者史,1~2周内出现症状,符合该病潜伏期特点。该患者以发热、咳嗽、咽痛、肌肉酸痛为首发表现,胸部CT未见病毒性肺炎表现,咽拭子新冠病毒核酸检测阳性,确诊COVID-19(轻型),毒株经测序后确认为Omicron变异株BA.5.1.3感染。患者及其孙子、孙媳妇均感染新冠病毒,体现了该变异株具有家庭聚集性发病的特点。

新冠病毒感染多数患者为无症状或轻型,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<sup>[7-9]</sup>。对于基础状况差、免疫力低下的老年人,新型冠状病毒更易导致危重型感染,死亡风险高<sup>[10]</sup>。本例患者亲属均年轻、无基础疾病,感染后无临床症状。而该患者为107岁高龄患者,感染后出现呼吸道症状及发热,但该患者治疗效果好,未进展为重型/危重型,考虑可能与以下因素有关:(1)患者既往无慢性基础疾病。《新型冠状病毒感染的肺炎防控方案(试行第9版)》中指出,患有高血压、冠心病、糖尿病等疾病的老人患者,一旦感染COVID-19容易发展为重症;(2)性别因素。男性和女性的基础先天免疫存在差异,男性先天体内的IL-8和IL-18等促炎细胞因子水平较高,更容易发生“炎症风暴”,而这与COVID-19病情恶化密切相关<sup>[11]</sup>。此外,雄激素敏感性可能是决定COVID-19疾病严重程度的关键因素之一<sup>[12]</sup>;(3)抗病毒治疗时机。COVID-19患者早期抗病毒治疗,可显著提高治愈率,改善预后<sup>[13]</sup>。早期使用抗病毒药物,可以抑制体内病毒复制,从而减轻组

织损坏及抑制炎症反应的激活<sup>[14-15]</sup>。患者高龄,入院查D-二聚体及乳酸升高,提示病情可能随时加重,故立即给予莫那匹韦联合人干扰素α2b喷雾剂抗病毒;(4)积极有力的综合治疗。包括维持内环境稳定、加强营养对症支持,纠正电解质紊乱(低钾、低钠、低氯)及酸碱失衡(代谢性酸中毒、高乳酸血症),补液、补充能量等;(5)预防深静脉血栓并发症。患者D-二聚体显著升高,考虑与高龄、久坐,血流速度减慢、血液高凝状态以及新冠病毒可能诱发血管内膜损伤等多个因素有关。因此,血栓形成及栓塞的风险显著升高,故早期针对性给予物理基础预防及药物抗凝治疗;(6)中西医结合治疗。患者入院后通过“辨证论治”,早期给予中药汤剂治疗,中西医结合,提高了治疗效果;(7)心理支持、人文关怀。患者为高龄女性,行动不便,存在语言沟通障碍,依从性差,隔离期间易产生孤独感及焦虑、抑郁等情绪,经专家讨论后同意由1名病毒核酸阳性家属全程陪护、照顾,并安排心理医师进行心理疏导。

新冠肺炎目前尚无特效治疗方法。本例感染的Omicron变异株BA.5.1.3为我国首次发现,且为百岁以上高龄患者,在国内外的报道较少。本文通过总结该例患者的临床表现特点及诊治经验,提示我们对此类患者应该早期给予抗病毒和中医中药治疗,并且加强综合对症处理及心理支持。

**利益冲突声明** 所有作者声明不存在利益冲突

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