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CASE REPORT

Implementing the Hospice Shared Care Model to Support a Patient with Advanced Colon Cancer: A Case Report

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Background: Compared to Western countries, palliative and hospice care services are used less often in Asian countries. While both types have been implemented in mainland China in recent years, their utilization rates have not increased satisfactorily. Moreover, few hospitals in mainland China implement hospice care using the hospice shared care model.

Objective: This study investigated a case in which the hospice shared care model was implemented for one patient with advanced colon cancer who had received treatment at a general tertiary hospital in mainland China.

Methods: Critical points of care included pain symptom management, nutritional support, application of the SHARE model for disease notification, family meetings to assist medical decision-making, relaxation therapy to relieve depressive symptoms, provisions to address end-of-life wishes, and support for primary caregivers.

Results: The patient's basic pain was controlled (Numeric Rating Scale, NRS2-3), and the score of the Depression Screening Scale (PHQ-9) decreased from 15 to 10 after intervention during hospitalization. In the end, the patient died comfortably and peacefully at home.

Conclusion: The hospice shared care team helped the patient with her physical and psychological pain, met her end-of-life wishes, and provided support for the families.

Keywords: advanced colon cancer, palliative care, symptom management, hospice share care, case report

Introduction

As the fifth leading cause of cancer death, colon cancer is one of the most common malignancies that seriously endanger human health.[1] It is characterized as a high malignancy, with rapid disease development, and poor prognosis, thus imposing a serious burden on those affected. Many such cases will require hospice care, which is focused on end-stage patients and their families, including provisions of physical, mental, social, and spiritual care to improve the quality of life.[2]

Several hospice services can be used at the end-of-life (EOL),[3,4] including outpatient and day palliative care clinics, acute palliative care units, community-based palliative care, hospice share care (HSC), hospice inpatient care (HIC), and hospice home care (HHC). Three of these hospital-based hospice delivery models are available in Taiwan, including HHC, HIC and HSC, the latter of which has been used to treat inpatients with advanced cancer since 2005.[5] In this context, HSC provides specialist consultations on hospice care in acute medical wards. Relevant professionals work with the primary medical specialist team to provide hospice care for terminally ill patients admitted to their original ward.[6,7] For HSC, a hospice shared care team should be established in the hospital to provide advice to end-stage patients who are not admitted to hospice care unit. The hospice shared care model extends hospice care services to non-hospice care wards, so that patients can have the opportunity to enjoy hospice care services.[8] This constitutes a cross-field and cross-disciplinary hospice care model that enables hospice care to be institutionalized.[9,10] However, few hospitals in mainland

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China have reported implementing hospice care services based on this model. One study reported that the hospice shared care model for the patients in the hospice care unit relieved patients' physical and psychological pain, and improved the families' satisfaction.[11] To address this gap, the current paper reports on a case in which the hospice shared care model was implemented for one patient with advanced colon cancer from a general hospital non-hospice care ward.

Patient Information

A female patient aged 61 years was diagnosed with stage IV colon cancer three months after palliative surgery and colostomy. This included the terminal ileum basin of both lungs, abdomen, mediastinal lymph nodes, liver, and multiple transfers. The response was poor although she received three rounds of chemotherapy after palliative surgery, and she presented with nausea and vomiting after the third round. She had pain in the left lower abdomen, paroxysmal pain in the left leg (Numeric Rating Scale, NRS4-5), and two to three episodes of breakthrough pain during the night (NRS6-7).

The patient had one daughter who lived with her. The daughter was married and had two daughters. The patient was primarily responsible for caring for her two granddaughters when she was healthy, but her daughter has since become the primary caregiver. Upon hospital admission, the patient was in a depressed mood. As her daughter and her husband deliberately hid part of her illness, the patient said she did not understand why the disease was not improving despite continuous treatment. She reported poor nighttime sleep, difficulty falling asleep, and difficulty waking up early. Her daughter felt helpless, but in front of the patient, she pretended that the disease prognosis was considerable.

Clinical Findings

Physical examination showed emaciation with a slightly distended abdomen.

Diagnostic Assessment

A B-ultrasound revealed that the patient had a small amount of ascites. The mucosa around the ileostomy tube is ruddy and with good bowel movement. She had hypoproteinemia (29 g/L) with an NRS-2002 nutritional score of 4. The patient received a score of 15 on the Depression Screening Scale (PHQ-9), indicating moderate-to-severe depression. At this admission, medical decisions were made after meeting with the patient and her family, with their consent to implement hospice care.

Therapeutic Intervention

Pain Management

At the time of admission, the patient's pain was not well-controlled, even after using oxycodone 80 mg PO Q12H. After an initial assessment by hospice care specialist nurses, a comprehensive pain assessment was therefore conducted by anesthesiologists and pain specialist nurses in the hospice shared care team, who developed a pain control plan. After direct communication, the pain specialist nurse discovered that the patient was reducing their medication dose without authorization due to the fear of drug addiction, therefore, suffering from pain. Considering this, the pain specialist nurse and pharmacist provided the patient with detailed pain education according to guidelines[12] for diagnosis and treatment of cancer pain and informed them of the importance of medication adherence. After repeated education, the patient's attitude toward painkillers improved. Following standardized titration, the oxycodone sustained-release tablets were adjusted to 160 mg PO Q12H. After regulation, the patient's basic pain was controlled (NRS2-3), and her sleep status improved.

Nutritional Support

The patient was admitted with hypoproteinemia (29 g/L) and an NRS-2002 nutritional score of 4. The nutritionist from the hospice shared care team comprehensively assessed her condition and suggested that she continue her routine diet while adding ENSURE 30 g TID between meals, either mixed with porridge or 100 mL of warm boiled water to drink. If the patient accepted the taste, the dose could gradually be increased to 60 g TID. At the same time, the patient was advised to increase the quantity of easily digested high-protein food. The nutritionist also suggested short-term

intravenous nutritional support, but the patient refused because she just wanted to try by herself more naturally. Following these recommendations, the patient's NRS-2002 nutrition score remained at 4 on the day of discharge, but her albumin slightly increased to 31 g/L.

Applying the SHARE Model for Disease Notification

The hospice shared care team employed the SHARE model[13] for disease notification, consisting of "Supportive environment", "How to break the bad news", "Provide additional information", and "Provide assurance and emotional support". Each step is described as follows:

Supportive Environment

The patient's family members were required to be present in a private environment.

How to Break the Bad News

When the oncologist and hospice specialist nurse visited the patient, she asked: "Why does this problem never go well?" The oncologist quickly seized a good opportunity to provide the patient with honest, clear, and comprehensible information about their condition, saying: "Sounds like you are wondering why you never get well, right? Then, I have some bad news for you". They continued: "This problem is quite persistent, and something bad is growing in your lungs, liver, and abdominal cavity. We have tried a lot, but it does not work". Family members held the patient's hands tightly. When the patient heard these statements, she cried with her daughter, saying: "In fact, even you do not tell me, I have guessed some". The oncologist and hospice specialist nurse accompanied the patient until she stopped crying. After calming down for a moment, she asked: "How long can I live?"

Provide Additional Information

In response to the patient's question, the oncologist replied: "We have only a few months, but we will try to alleviate your discomfort". The team tried to provide information that the patient desired, including items concerning her future treatment, the impact of the disease on her daily life, and any relevant concerns.

Provide Assurance and Emotional Support

The informant should show a sincere and warm attitude when patients and their family members are crying. At the same time, patients and their family members should be encouraged to express their emotions. They should be given sufficient time to express their sadness during the crying period.

In this case, the hospice shared care team successfully used the SHARE model to complete disease notification. After learning about her condition, the patient experienced short emotional fluctuations but also showed understanding with her family members.

Family Meetings to Assist Medical Decision-Making

When the patient was truthfully informed about her condition, she wanted to return home and forego antitumor treatment. Her daughter hoped that she could comfortably proceed through the final stage and agree with her mother, but the patient's husband strongly objected, insisting on continued chemotherapy. After obtaining consent from the patient and her family, the team prepared a family meeting. First, the hospice specialist nurse introduced the meeting. Then, the oncologist from the hospice shared care team explained and analyzed the patient's situation in detail. The team showed them the advantages and disadvantages of anti-cancer therapy. After this, the patient's husband cried and expressed concerns but finally agreed to forego chemotherapy.

Relaxation Therapy to Alleviate Depressive Symptoms for the Patient

At the time of admission, the patient received a score of 15 on the Depression Screening Scale (PHQ-9), indicating moderate-to-severe depression. The mental health specialist and mental health specialist nurse from the team reevaluated the patient. They discovered that she was worried about the progress of her disease but did not dare to face reality or ask her family members directly. As such, she was instructed to relax by breathing observation to alleviate her worries. In

addition, mental health specialists recommended that citalopram 5mg once a day (by oral) be administered for two consecutive days. This was then changed to 10mg once a day for two consecutive days. Finally, it was added to 20mg once a day. After two weeks of continuous intervention, the patient received a score of 10 on the PHQ-9.

Support Provided to Primary Caregivers

The husband had difficulty accepting that the patient was dying. He appeared depressed, often crying in front of the medical staff, saying: "What am I going to do when she's gone? I could not bear to see her go". Since the decision to forego chemotherapy, the patient's family expressed anticipatory sadness, wishing to alleviate the patient but also expressing ambivalence about their imminent death.

In response, family members were educated about death. They were told about the importance of providing warmth, expressing love, controlling the patient's discomfort and symptoms, and meeting her end-of-life wishes. Finally, they expressed their love and thanks, offered apologies, said goodbyes loudly, and slowly accepted the reality of the patient's imminent death. At the same time, the team taught the family how to participate in the patient's home care before discharge, including pain assessment, medication management, and supportive companionship.

Follow-Up and Outcomes

During hospitalization, the patient was accompanied by her family members. Further, the daughter created a photo album and brought this to the hospital to review bits and pieces of the patient's life, affirming the value and dedication therein. Finally, the patient's dying wish was met, and she was taken to her hometown in Hubei Province. After discharge, the hospice specialist nurses kept in touch with the family members and provided support through WeChat. The patient died peacefully at home 20 days later. The family members expressed great gratitude for the warm care and support provided by the hospice team during the patient's dying period.

Discussion

A literature review found that several hospice models were available in China, including community-based palliative care,[14] HSC,[15] HIC,[16] and hospital-community-home three-level linkage hospice care.[17] Of these, HSC programs can increase hospital hospice care coverage, effectively reduce medical expenditures, and provide high-quality services to patients with advanced cancer.[5] But only a few hospitals have implemented this model in practice.[11,15]

Pain is one of the most common symptoms experienced by end-stage patients. In China, the incidence of pain in patients with advanced cancer is as high as 60% to 80%, which seriously affects their quality of life.[18] In this context, the main obstacles to pain management are the patient's knowledge level, attitude, reluctance to report pain, and fear of addiction.[8] Several studies have found that education can reduce the incidence of incorrect beliefs and improve medication adherence.[19,20] In this case, the hospice specialist nurse and pharmacist, educated the patient, who finally accepted opioids.

In China, disease information is a huge challenge for medical staff. It is considered more acceptable to inform the patient's family about cancer rather than telling the patient directly. Because people believe the patient will fall into fear and pessimism after knowing the truth.[21] But, on the contrary, one study shows that those who know the truth have higher survival expectations and a more positive attitude towards life.[22] The patients who were informed the truth by the SHARE model had lower anxiety.[23] In this case, a sudden diagnosis of advanced colon cancer placed heavy pressure on the patient's family. They faced a dilemma, they wanted to tell her the truth but also worried about her affordability. This prompted the team to inform the patient about her disease using the SHARE model,[13] developed based on an in-depth understanding of how cancer patients prefer disease information. In this case, the team implemented the SHARE model according to the four steps, "Supportive environment", "How to break the bad news", "Provide additional information", and "Provide assurance and emotional support". First, the team provided a private environment when the family members were all present in the ward. In the "How to break the bad news", part, the team helped the patient to understand more about her condition, and tell the truth, and accompanied them. In this case, the patient was sad after knowing the truth even though she guessed some, but also showed understanding with her family members. In the "Provide additional information", part, it is very important to answer their concerns. It could help them to do some plans for the future. "Provide assurance and emotional support", this part could make the patient and their family members felt

warm, supported, and hopeful. Through the usage of the SHARE model, disease notification was successfully implemented, and the patient finally accepted the truth.

The patient's husband could not accept that she was dying and instead wished to persist with chemotherapy. Upon learning this, the team arranged a family meeting[24] designed to assist the patient with treatment decisions. During such events, hospice specialist nurses work as navigators, evaluators, educators, and supporters.[25] Ultimately, the husband agreed to forego curative treatment, but this induced strong psychological and emotional reactions in the family.[26] As primary caregivers, family members are prone to anticipatory grief when faced with multiple pressures, including separation caused by the deterioration of the patient's condition and worries about the future.[27] In this case, it was a huge shock for the husband, who was therefore provided with death education by recommending movies and books on death, such as 《COCO》and 《Being Moral》, and provided with emotional support. He eventually showed his love, gave thanks, offered apologies, and said goodbye.

The main limitation of this case was that the follow-up period was short; long-term follow-up of the patient's family for their psychological and emotional is necessary. Another limitation of this report is that the team ignored peer support for the primary medical specialist team.

Conclusions

This case report covered a patient with advanced colon cancer treated by a hospice shared care team. The patient was treated with dignity by coordinating with the primary care team. The hospice shared care team helped the patient with her physical and psychological pain, and met her end-of-life wishes. Besides, it supported for the family members to go through the tough period.

Ethics Approval from Hospital Committee

This case obtained approval from the Human Subjects Committee of Affiliated Sir Run Run Shaw Hospital, Zhejiang University School of Medicine.

Declaration of Patient Consent

The authors certify that they obtained an appropriate patient consent form. In this form, the patient provided consent for her clinical information to be reported in the journal. The patient understands that her name and initial will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Disclosure

The authors report no conflicts of interest in this work.

References

1. Grothey A, Sobrero AF, Shields AF, et al. Duration of adjuvant chemotherapy for stage III colon cancer. *N Engl J Med*. 2018;378(13):1177–1188. doi:10.1056/NEJMoa1713709
2. National Health and Family Planning Commission. Notice of the general office of the national health and family planning commission on the issuance of practice guidelines for hospice care (trial). Bulletin of the National Health and Family Planning Commission of the People's Republic of China; 2017:53–73.
3. Teno JM, Gozalo PL, Bynum JPW, et al. Change in end-of-life care for Medicare beneficiaries: site of death, place of care, and health care transitions in 2000, 2005, and 2009. *JAMA*. 2013;309:470–477. doi:10.1001/jama.2012.207624
4. Wright AA, Keating NL, Ayanian JZ, et al. Family perspectives on aggressive cancer care near the end of life. *JAMA*. 2016;315:284–292. doi:10.1001/jama.2015.18604
5. Lai WS, Liu IT, Tsai JH, et al. Hospice delivery models and survival differences in the terminally ill: a large cohort study. *BMJ Support Palliat Care*. 2021;2:1–10. doi:10.1136/bmjspcare-2021-003262
6. He Y-J, Lin M-H, Hsu J-L, et al. Overview of the motivation of advance care planning: a study from a medical center in Taiwan. *Int J Environ Res Public Health*. 2021;18:417. doi:10.3390/ijerph18020417
7. Lin W-Y, Chiu T-Y, Ho C-T, et al. Hospice shared-care saved medical expenditure and reduced the likelihood of intensive medical utilization among advanced cancer patients in Taiwan--A nationwide survey. *Support Care Cancer*. 2014;22:1907–1914. doi:10.1007/s00520-014-2168-5
8. Chuang R. Introduction to hospice share Care. *Hospice Care*. 2005;10(1):5. doi:10.0001/40-200502-10-1-39-43-a
9. He Z-D, Lin W-Y, Lin Z-J. Hospice shared care service: an innovative model for community development. *Formosan J Med*. 2011;15(1):32–36. doi:10.6320/FJM.2011.15(1).06

10. Yu Y, Lu H, Zhang Y, et al. Exploration and practice of hospice co-care model in cancer hospitals. *Chin Nurs Manag*. 2021;21(7):966–970. doi:10.3969/j.issn.1672-1756.2021.07.002
11. Li S, Zhang XY, Lu YY, et al. Construction and implementation effect analysis of hospices co-care model in general hospitals. *Med Philos*. 2021;42(21):26–30. doi:10.12014/j.issn.1002-0772.2021.21.06
12. National Health Commission of the People's Republic of China. Guidelines for diagnosis and treatment of cancer pain (2018 version). *J Clin Oncol*. 2018;23(10):937–944.
13. Fujimori M, Uchitomi Y. Preferences of cancer patients regarding communication of bad news: a systematic literature review. *Jpn J Clin Oncol*. 2009;39(4):201–216. doi:10.1093/jjco/hyn159
14. Wang QF. SWOT analysis of the hospice operation model based on the construction of county medical community. *Mod Pract Med*. 2021;33(2):233–235. doi:10.3969/j.issn.1671-0800.2021.02.047
15. Qiao S, Xian X, Yao L, et al. Application of nurse-led hospice multidisciplinary collaborative care model in general hospitals. *Chin Nurs Res*. 2022;36(17):3151–3155. doi:10.12102/j.issn.1009-6493.2022.17.026
16. Wang Y, Cheng QQ, Wei T, et al. Construction and practice of oncology specialized hospice ward. *Chin Nurs Manag*. 2019;19(6):806–810. doi:10.3969/j.issn.1672-1756.2019.06.002
17. Zhang XH, Zhang CH, Li YW, et al. Construction and application of a three-level linkage hospice care model for patients with advanced cancer. *Chin J Nurs*. 2022;57(14):1676–1682. doi:10.3761/j.issn.0254-1769.2022.14.002
18. Lu J, Wang XL, Wang Q, et al. Research progress of assessment tools for pain management disorders in cancer patients. *J Nurs Sci*. 2022;37(7):19–22. doi:10.3870/j.issn.1001-4152.2022.07.019
19. Peng L, Chen L, Chen J. Effect of motivational interview-based health education on cancer pain control and quality of life in patients with advanced cancer. *Nurs Pract Res*. 2019;16(4):4–6. doi:10.3969/j.issn.1672-9676.2019.04.002
20. Qiao S, Tang L, Zhang W, et al. Nurse-led follow-up to outpatients with cancer pain treated with opioids at home-telephone calls plus WeChat versus telephone calls only: a quasi-experimental study. *Patient Prefer Adherence*. 2019;13:923–931. doi:10.2147/PPA.S203900
21. Zeng T, Zou J, Fang P. A survey of informing attitude and its influencing factors in common patients toward illness condition of cancer. *Chin Nurs Res*. 2009;23(13):1156–1158. doi:10.3969/j.issn.1009-6493.2009.13.011
22. Tang Y. Analysis of death attitudes and needs for disease notification of elderly patients with advanced cancer and their family caregivers. *Med Philos*. 2017;38(6B):93–96. doi:10.12014/j.issn.1002-0772.2017.06b.26
23. Wang S, Li Y, Wang H. The implement of SHARE model in hospice care. *Int J Nurs*. 2020;39(12):2201–2203. doi:10.3760/cma.j.cn221370-20190308-00685
24. Kawashima T, Tanaka M, Kawakami A, et al. Nurses' contributions to end-of-life family conferences in critical care: a Delphi study. *Nurs Crit Care*. 2020;25(5):305–312. doi:10.1111/nicc.12512
25. Gao XY, Chen YY, Wen H, et al. Research progress on role function and experience of hospice care nurses in communication. *Chin J Nurs*. 2021;56(7):1093–1098. doi:10.3761/j.issn.0254-1769.2021.07.023
26. Guo R, Lu Y. Hospice care practice for a patient with end-stage pancreatic cancer. *Chin J Nursing*. 2017;52(6):672–674. doi:10.3761/j.issn.0254-1769.2017.06.006
27. Nielsen MK, Neergaard MA, Jensen AB, et al. Psychological distress, health, and socio-economic factors in caregivers of terminally ill patients. *Support Care Cancer*. 2016;24(7):3057–3067. doi:10.1007/s00520-016-3120-7