

Exploration of Precise Medical Management Model in Treatment of Anorectal Disease Integrated Traditional Chinese and Western medicine

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Abstract: Anorectal disease is a common and frequently-occurring disease in clinic, which has a serious impact on the physical and mental health and quality of life of patients. The treatment of this kind of disease with integrated traditional Chinese and western medicine has achieved satisfactory results. This paper aims to discuss the introduction of refined medical management target model into the management of anorectal disease with integrated traditional Chinese and western medicine. The idea of fine management is to construct the management model of integrative Chinese and western medicine in the treatment of anorectal diseases, and to explore its role and value. The results showed that the average hospitalization days were shortened by 2.76 days, the average cost of antibiotics decreased by 15.71%, the average cost of antibiotics and the number of days of use decreased month by month, and the patients' satisfaction increased. The model of introducing refined management objectives into the treatment of anorectal diseases is more suitable, pertinent, controllable and open, which will help to deepen the management of anorectal diseases with integrated traditional Chinese and western medicine, and bring benefits to the management effect.

1. Introduction

In recent years, with the deepening of the medical and health reform system in China, the past management model has been unable to meet the needs of hospital development. Exploring a low-cost, high-benefit development path, so that the level of hospital performance management can be continuously improved, is the latest challenge facing major hospitals in China[1]. On the whole, fine management is based on science and technology, characterized by fine operation, making full use of various existing resources, strengthening collaboration, and constantly improving the hospital's organizational execution ability, so as to achieve the purpose of reducing costs and costs, and then improving the efficiency and efficiency of the work of general hospitals[2].

Integrated traditional Chinese and western medicine surgery started in the early 1960s, and has gone through nearly half a century[3]. It has made great achievements in the treatment of anorectal diseases, malignant tumors and perioperative integrated traditional Chinese and western medicine. In the process of diagnosis and treatment of anorectal diseases, the integrated surgery of traditional Chinese and western medicine integrates the advantages of traditional Chinese medicine and western medicine, expands the scope of clinical diagnosis and treatment, and pays full attention to the concept of minimally invasive and individualized treatment mode. It has great advantages and made great achievements, and has also been affirmed and supported by the state and the people[4]. However, it is undeniable that there are still many problems to be solved in the diagnosis and treatment of clinical anorectal diseases. Therefore, it is necessary and important to explore its refined medical management mode on the basis of summing up the existing experience and shortcomings.

As an advanced and scientific management concept, refined management has been widely introduced into hospital management. Fine management is characterized by "accuracy, meticulousness, in-depth, and standardization". Microscopically, every task needs to be fine-tuned and quantified, and the work and management processes are scientifically refined and rationally optimized to facilitate management objectives. Then the concept of refined management is

introduced into the work of integrating Chinese and western medicine to treat anorectal diseases. Can it be more effective to play the management role of integrated Chinese and western medicine in the treatment of anorectal diseases, and bring benefits to the management effect? This paper aims to explore the goal of introducing refined medical management in the treatment of anorectal diseases with integrated Chinese and western medicine, and to construct a management model of anorectal diseases with integrated Chinese and western medicine, and explore its role and value[5].

2. Materials and Methods

2.1. General information

A total of 236 patients undergoing anorectal surgery admitted to our hospital from May to September 2017 were enrolled in this study. The implementation of the integrated management of anorectal diseases was performed in combination with Chinese and western medicine, and compared with 227 patients undergoing anorectal surgery in the same period of 2018. There were no significant differences in gender composition and age between the two groups ($P > 0.05$), which were comparable.

2.2. Fine design path form

In the past, the implementation of the route form in our hospital was mainly based on the template issued by the health administration department, which was applied in clinic from outside to inside, and the development model was rough[8]. After re-examining the formulation process of the path form, it is determined that the implementation of integrated traditional Chinese and western medicine in the treatment of anorectal diseases should take clinicians as the main body, the improvement of integrated traditional Chinese and western medicine in the treatment of anorectal diseases should take physicians as the leading ideology, and the combination of diagnosis and treatment norms and control objectives as the general direction of path design. Based on the latest edition of the diagnostic and therapeutic guidelines, a more suitable anorectal surgical route form was designed and reviewed by the expert group after in-depth discussion with the doctors of different levels in the corresponding departments. The main adjustments are as follows:

(1) Hospitalization time: According to the actual situation, the average length of stay was further compressed from 14 to 21 days before adjustment to 10 to 18 days.

(2) Stage of hospitalization: According to the treatment process, the same or similar stages of the original form are merged, which simplifies the clinical operation process.

(3) Average cost per time: The upper and lower limits of cost, i.e. 40000-70000 yuan, have been determined. By changing the color of data, the information system can give special identification and prompt to patients who exceed the upper and lower limits, and provide the function of calculating the cost proportion and drawing the cost distribution, which is helpful for clinicians and managers to carry out targeted analysis.

(4) Use of antibiotics: By adjusting the necessary doctor's advice, patients who still use antibiotics 3 days after operation should be limited. Doctors should fill in the causes of variation, so as to control and monitor the rationality of the use of antibiotics.

2.3. Establishment of information management and control model

Establish an open single disease data statistics platform to achieve a wide range of information acquisition for patients entering the pathway. In order to objectively grasp the medical quality of single disease, valuable data were screened according to the control objectives, analyzed and intervened, and a refined management model for the treatment of anorectal diseases with the combination of traditional Chinese and western medicine was established, so as to achieve diversified management objectives. We reexamined every link from admission to discharge of patients undergoing anorectal surgery, sorted out more than 30 data indicators that could be defined and collected, and screened out five categories of 36 indicators related to clinical quality control, including (1) efficiency indicators: average length of stay, preoperative level. Average

hospitalization days, 14 days re-hospitalization rate and 31 days re-hospitalization rate. (2) Therapeutic indicators: including cure rate, improvement rate, mortality rate, complication rate and unplanned reoperation rate. (3) Cost indicators. (4) Hospital infection control indicators. (5) Indicators for the treatment of anorectal diseases by integrated traditional Chinese and western medicine, including the number of paths implemented, the total number of patients admitted, the proportion of patients discharged from hospital, the rate of entry, completion, variation, the number of variations and withdrawals, and the rate of medical insurance patients. Thirty-six indicators were included in the information collection system for the treatment of anorectal diseases by integrated traditional Chinese and western medicine, as the daily monitoring object of single disease medical quality[6].

2.4. Promoting the professional level of nursing

Carry out professional training, including vocational skills, theoretical basis, ideological knowledge, work attitude and so on. Studies have shown that nursing professional quality and comprehensive ability of nurses are the most important foundation of nursing quality and safety[7]. According to the characteristics of nursing for rheumatic immune diseases, the undergraduate course carries out a series of related training and carries out continuing education system, with “three basic” training as the basis, knowledge and nursing of common diseases and frequently-occurring diseases as the focus, rescue and nursing operation as the key points, communication between nurses and patients, and knowledge of Humanities and law as the auxiliary points. To urge nurses to continue to strengthen their learning, contact with new knowledge and master new technologies. Through a series of professional learning, nursing rounds, shift meetings, lectures, reading materials, on-site demonstration training, to enhance the professional level and comprehensive ability of nursing staff[9].

3. Results

3.1. Average length of stay

All patients who met the criteria of anorectal approach were included in the management of anorectal diseases treated by integrated traditional Chinese and western medicine. After implementing the refined management model of integrated traditional Chinese and western medicine for anorectal diseases, the average hospitalization days in May-September 2017 were 15.53 days, 16.32 days, 14.22 days, 16.58 days and 16.18 days, respectively. The average hospitalization days in each month were 15.53 days, 16.32 days, 16.58 days and 16.18 days, respectively. Year-on-year shortening, an average of 2.76 days (Table 1).

Table 1 Average period of hospital stay

Item	Year	May	Jun	Jul	Aug	Sep	Average
hospital stay	2017	16.92	17.15	21.91	17.38	19.28	18.53
	2018	15.53	16.32	14.22	16.58	16.18	15.77

3.2 Comparison of average cost

From 62475.18 yuan per person in the initial stage of the refined management mode to 58834.37 yuan per person (Table 2) after the refined management, the average cost of anorectal surgery patients decreased by 15.71% compared with the same period last year.

Table 2 Comparison of average cost

Item	Year	May	Jun	Jul	Aug	Sep	Average
hospital cost	2017	61883.73	66334.16	79487.36	69224.78	72048.14	69807.42
	2018	62475.18	59767.15	57914.28	57394.18	56781.46	58834.37

3.3 Comparison of antimicrobial use

The average cost of antimicrobial drugs decreased from 388.06 yuan per person in the initial stage of fine management to 2642.37 yuan per person every month; the proportion of antimicrobial drugs decreased continuously, from 5.18% to 4.37%, the average days of antimicrobial drugs use decreased from 7.68days to 5.47 days, and the proportion of patients using third-line antimicrobial drugs decreased from 18.33% in the initial stage to below month by month. Drop until it reaches zero (Table 3).

Table 3 Utilization of antibiotic

Time	Average costs of antibiotic /yuan	Proportion of antibiotic costs/%	Average days of using antibiotic/days	Proportion of using the third line antibiotic/%
May.2018	3178.46	5.18	7.68	18.33
Jun.2018	3249.45	5.45	7.11	13.21
Jul.2018	2937.12	5.05	6.71	0.00
Aug.2018	2746.78	4.98	6.16	0.00
Sep.2018	2642.37	4.37	5.47	0.00

3.4 Comparison of nursing quality score and patient satisfaction

The data of two groups of patients were sorted out and analyzed by SPSS 26.0 statistical software. After the implementation of fine management, the nursing quality score of nurses was higher than that before the implementation, and the difference was statistically significant ($P < 0.001$), as shown in Table 4.

Table 4 Comparison of nursing quality score in different year

Year	Nursing quality score	T	P
2017	96.45±0.45	-14.345	<0.001
2018	99.30±0.28		

After nursing intervention with different management modes, 148patients (62.7%) in the observation group were very satisfied, 65patients (27.5%) were satisfied and 23 patients (9.8%) were unsatisfactory; 95patients (41.9%) in the control group were very satisfied, 52 patients (22.7%) were satisfied and 80 patients (35.4%) were unsatisfactory. The nursing satisfaction of patients in the observation group was 90.2% (213/236) significantly higher than that of the control group (64.6% (147/227)). The difference was statistically significant ($P < 0.05$), as shown in Figure 1.

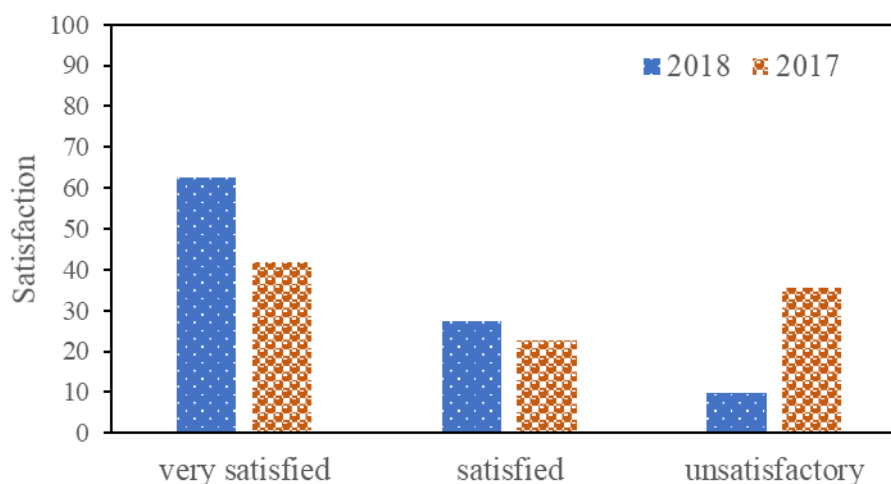


Fig.1. Comparison of patient satisfaction in different years

4. Conclusion

In summary, the application value of fine management in the nursing of rheumatic immune diseases is significant, which can effectively improve the quality of nursing work and patients' satisfaction with nursing. In addition, it can also help to improve the professional knowledge and nursing operation skills of nursing staff. This method has clinical nursing significance and is worth being widely used. Through detailed analysis and demonstration, the process of diagnosis and treatment is more reasonable and smoothly, more suitable for the specific situation of clinical diagnosis and treatment, adapted to clinical needs, more convenient for the promotion and management of integrated traditional Chinese and western medicine for anorectal diseases, and more suitable. The adjusted and optimized form for the treatment of anorectal diseases by integrated traditional Chinese and western medicine is easier for clinicians to accept and use, and is conducive to the promotion and in-depth management of the treatment of anorectal diseases by integrated traditional Chinese and western medicine.

References

- [1] Guerriero L, Quero G, Diana M, et al. Virtual Reality Exploration and Planning for Precision Colorectal Surgery[J]. Diseases of the Colon & Rectum, 2018, 61(6):719-723.
- [2] Liu Y H, Yao H W, Xin L. Give Attention to both Minimally Invasive Surgery and Precision Medicine to Promote the Scientificity on Individualized Clinical Practice of Rectal Cancer[J]. Chinese Journal of Surgery, 2016, 54(6):404.
- [3] Carrington E V, Heinrich H, Fox M R, et al. Sa1363 International Survey of Methods for Anorectal Manometry: An Exploration of Variability in Current Practice[J]. Gastroenterology, 2015, 148(4):304.
- [4] He L, Deng T, Luo H. Efficacy and Safety of Endoscopic Resection Therapies for Rectal Carcinoid Tumors: A Meta-Analysis[J]. Yonsei Medical Journal, 2015, 56(1):72-81.
- [5] Piñero J, Queraltrosinach N, Bravo À, et al. a Discovery Platform for the Dynamical Exploration of Human Diseases and their Genes[J]. Database, 2015, 2015(3):28.
- [6] Saeed M, Wang Y, Donna I, et al. Exploring Gaps of Family History Documentation in EHR for Precision Medicine-A Case Study of Familial Hypercholesterolemia Ascertainment:[J]. Amia Jt Summits Transl Sci Proc, 2016, 2016:160-166.
- [7] Lin M C, Iqbal U, Jack Li Y C. The New Mindset for Embracing Precision Medicine: Developing New Approaches for Exploring Diseases[J]. Computer Methods & Programs in Biomedicine, 2017, 140:A1-A1.
- [8] Chen Q, Staton A D, Ayer T, et al. Exploring the Potential Cost-Effectiveness of Precision Medicine Treatment Strategies for Diffuse Large B-cell Lymphoma[J]. Leuk Lymphoma, 2017, 59(7):1-10.
- [9] Li J, Wei H, Li X, et al. Exploration and Research of Community Management Model for Asthmatic Children[J]. Chinese Journal of Pediatrics, 2014, 52(5):353-357.