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Special Feature Article

Development of Instant Guide to the Initial Management of Anorexia Nervosa

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Abstract

Eating disorders (Eating disorders: Eds) can become psychologically and physically severe, and have the highest mortality rate among patients with mental disorders. It is also more severe and difficult to treat when it is prolonged. Therefore, as with any other disease, it is important to detect Eds at an early stage and treat it as soon as possible.

However, the medical environment surrounding Eds in Japan is not necessarily well developed, and ED patients tend to be concentrated in a few specialty institutions. In addition, ED cases tend to be avoided by general medical institutions owing to the troublesome characteristics of the disease, such as resistance to treatment despite the physical severity. Furthermore, there is no standard treatment in Japan, and treatment for Eds is up to each medical institution.

In light of this, the project by the Japan Agency for Medical Research and Development (AMED) —"Development of Guidelines for a Treatment Support Network and a Simple Treatment Program for Eating Disorders"—aims to reduce the barriers for non-specialty institutions. This would enable them to take charge of the treatment of Eds, and unify the treatment at specialty and non-specialty institutions. We developed the "Instant Guide to the Initial Treatment of Anorexia Nervosa (Anorexia nervosa: AN)" in line with the aim of the project.

In developing this guide, information was collected from domestic and international ED guidelines and evidence. The guide consists of four materials—initial support, physical

management, psychoeducation, and nutritional management—allowing the users to refer to the necessary information according to the patients' condition. It is designed for immediate use in practice, with specific instructions on how to guide patients to therapy and improve their physical condition. The guide had been used by clinicians on a trial basis and had been revised based on their feedback before completion.

The development and dissemination of this guide is expected to reduce the barriers to AN treatment and improve the ED medical system so that patients with AN can receive initial treatment in a relatively uniform manner at the medical institutions close to them.

Keywords: eating disorders, anorexia nervosa, instant guide, initial management

Introduction

Eating disorder (ED) is known to become more severe not only physically but also psychologically if it is prolonged.⁵⁾ In particular, it has been reported that the survival rate of patients after the onset of anorexia nervosa (AN) is lower than that of those with other EDs,¹⁾ so early detection and treatment are extremely important.

However, the medical environment regarding ED in Japan is not well-developed, and there are issues such as the large number of ED patients who visit only a small number of specialized medical institutions. In addition, while there are cases where appropriate action can lead to improvement, it is undeniable that the characteristics of the disease, such as the fact that patients are physically very ill but resist treatment, mean that it is a condition that is often avoided by general medical

institutions. Furthermore, there is no standard treatment or instant guide to unified treatment in Japan, and the response to the disease is left to each medical institution.

In this paper, we will introduce the background and overview of the development of the “Instant Guide to the Initial Management of Anorexia Nervosa,” which was developed to promote unified initial management of patients with AN.

I. Issues for Specialist Medical Institutions for Eating Disorders

Although there are specialist medical institutions for EDs throughout Japan, there are few of them, and they tend to be unevenly distributed, mainly in large cities. Therefore, there are many cases where patients are concentrated in a small number of specialist medical institutions, and it often takes a long

time from making an appointment to actually seeing a doctor. In addition, even at specialist medical institutions, it is difficult to secure sufficient medical resources to treat a large number of patients, and there are limits to the capacity of medical care. In addition to efforts to increase the number of specialist doctors and specialist medical institutions, it is also considered essential to solve this problem by creating a system that allows general internal medicine and psychiatric medical institutions (non-specialized medical institutions) that do not specialize in EDs to treat patients with them to a certain extent to help overcome this problem.

II. Issues for Non-specialist Medical Institutions

As mentioned above, ED is a condition that is often avoided by non-specialist medical institutions because patients are typically resistant to treatment and their condition may worsen physically. The reason for this is thought to be the hurdles that non-specialist medical institutions face when treating ED patients, such as how to: deal with those who are resistant to treatment, assess the physical and nutritional status, provide treatment, and motivate patients to receive treatment. In order to overcome these hurdles, the existence of a unified initial management guide is

essential, and its development is urgently needed.

III. Development of the “Instant Guide to the Initial Management of Anorexia Nervosa”

In order to overcome the issues mentioned above, we developed the “Instant Guide to the Initial Management of Anorexia Nervosa”³⁾ through the sub-research and development project 'Development of a Brief Treatment Program for Anorexia Nervosa' in the 'Development of Guidelines and Brief Treatment Programs for Eating Disorders' (research and development representative: Tetsuya Ando), which was supported by the Japan Agency for Medical Research and Development (AMED) from 2017 to 2019. The purposes of this guide are to: (i) reduce the barriers to non-specialist medical institutions becoming involved in ED treatment, and (ii) unify the responses of specialist and non-specialist medical institutions. This guide can be downloaded free of charge from the website of the Japan Society for Eating Disorders.⁴⁾

IV. Overview of the “Instant Guide to the Initial Management of Anorexia Nervosa”

Based on guidelines and evidence from Japan and overseas, this guide outlines

the initial response to AN treatment at non-specialist medical institutions, divided into four key areas (initial response, psychoeducation, physical management, and nutritional management). It is designed to be as easy to use as possible, with a handy size and minimized text to make it easy to read.

1. Initial response

This section specifically describes physical findings (Figure a) that should raise suspicion of AN, such as specific body mass index (BMI) values and the speed of weight loss, as well as blood test findings, medical history, and behavior, and highlights points to note during the medical interview and items that should be asked about.

2. Psychoeducation

In the case of EDs, especially AN, because there is a lack of recognition that one is ill, psychological education to increase motivation for treatment is extremely important. Information needed for psychoeducation, such as the adverse effects on the body of malnutrition and low body weight, including electrolyte abnormalities, and the occurrence of mental symptoms such as depression and obsessions, is outlined, as well as activity restrictions tailored to the patient's condition, treatment goals, and how family

members should interact with the patient. The article also describes how to respond to the patient's stage of behavioral change.

3. Physical management

AN can cause various physical complications due to factors such as malnutrition, vomiting, and laxative abuse.

Typical examples include hypokalemia, liver dysfunction, hypoglycemia, and hypophosphatemia, and it is essential to take appropriate action in each case. This is probably the area that non-specialists in EDs, particularly health care professionals who are not used to treating physical complications, find most difficult to deal with. Therefore, this guide outlines the physical complications that can occur with low body weight and malnutrition, and describes specific methods for dealing with them. In order to make it immediately usable in clinical practice, we have made every effort to use brand names for drugs, etc.

4. Nutritional management

For the treatment of AN patients, it is essential to restore nutrition through refeeding. However, there are many questions regarding how to determine the initial energy requirements of patients in a state of starvation and administer nutrition. An example of

how to determine the energy requirements of patients with AN is shown in Figure b. As presented in the figure, it is clearly stated that there are points of uncertainty in general practice, such as the use of the Scalfi formula rather than the commonly used Harris-Benedict formula for determining the energy requirements of adult patients with emaciation, as seen in patients with AN. In this way, this guideline specifically describes how to: determine energy requirements, administer nutrition, and prevent refeeding syndrome, which is a risk that occurs during refeeding.

V. Utilizing the “Instant Guide to the Initial Management of Patients with Anorexia Nervosa”

The Kyushu University Hospital Department of Psychosomatic Medicine (our department), to which the author belongs, is home to the Fukuoka Prefectural Support Base Hospital for Eating Disorders (formerly the Fukuoka Prefectural Eating Disorder Treatment Support Center), one of four ED support base hospitals in Japan. This project is being developed under the leadership of the national and prefectural governments, with the main pillars being: (i) counseling and support for patients and families with ED, (ii) advice and guidance for medical institutions, and (iii) awareness and

dissemination of information about ED to the prefectural population. Through consultation support and dissemination/awareness activities, the proportion of young teenage patients with ED presenting to our department is increasing every year, and it is considered that these activities may be contributing to the early detection and treatment of EDs.²⁾ In addition, the characteristics of EDs, which cause ambivalent feelings about treatment, suggest that there may be a large number of potential ED patients. Therefore, in addition to dissemination and awareness-raising activities, we consider that it is important to increase the number of medical institutions that can treat EDs, and we are actively providing medical institutions with advice and guidance. As a result of these activities, the number of medical institutions in Fukuoka Prefecture that can provide consultations on EDs is on the rise, and in recent years, training sessions using the “Instant Guide to the Initial Management of Patients with Anorexia Nervosa” have been held for these medical institutions, and attempts have been made to share common initial response methods. In addition, training sessions on the treatment of ED patients for beginners using the contents of this guide are being held at the National Center of

Neurology and Psychiatry, and dissemination of the guide is expected.

Conclusion

As I have said repeatedly, although early diagnosis and treatment are important for EDs, patients themselves have little knowledge of their disease and are reluctant to visit medical institutions. For this reason, it is considered that there may be a large number of potential patients with ED. Therefore, it is extremely important that when a family member or the patient him/herself realizes that he/she has ED, the medical institution they visit does not shun them, but takes appropriate action and refers them to a specialized medical institution. The "Instant Guide to the Initial Management of Patients with Anorexia Nervosa" is expected to reduce the barriers to the treatment of ED patients and lead to the development of a medical system for EDs that allows for relatively uniform initial treatment in familiar medical settings.

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a. 神経性やせ症 (AN) を疑うべき身体所見

- 気分不良や体調不良で説明できない痩せ
- 低体重 (成人): BMI 17 kg/m²未満
- 急な体重変動: 1 カ月に 8%以上の増減
- 耳下腺腫張
- 吐きダコ (手の甲にみられる傷: ラッセル徴候)
- 歯の形や色の変化 (酸蝕), 虫歯
- 徐脈
- 無月経や月経異常 (女性)

※明らかな症候なしに発症していることもある

b. エネルギー必要量の決定

①基礎代謝量を算出する
②基礎代謝量を基に, エネルギー必要量を決定する

■■■①基礎代謝量の算出■■■

【女性患者】

- 基礎代謝量の算出には, Scalfi の式を用いる
- 18 歳未満

基礎代謝量 (kcal/day) = (92.8 × 体重 (kg)) × 0.238

体重 (kg)	20	25	30	35	40	45
基礎代謝量 (kcal/day)	442	552	663	773	883	994

- 18 歳以上

基礎代謝量 (kcal/day) = (96.3 × 体重 (kg)) × 0.238

体重 (kg)	20	25	30	35	40	45
基礎代謝量 (kcal/day)	458	573	688	802	917	1,031

図 『神経性やせ症 (AN) 初期診療の手引き』の記載例

Figure: Example of “Instant Guide to the Initial Management of Patients with Anorexia Nervosa”