



Case Report

Anti-Inflammatory and Probiotic Synergy in the Therapy of Mood Disorders

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Abstract

Mood disorders can affect us all in the course of our lives, and make our existence very dark and often hopeless. This case report aims to highlight how a rational use of properly prescribed anti-inflammatory drugs and probiotics can greatly help the patient to regain willpower and joie de vivre.

Keywords: Mood disorders; Anti-inflammatory drugs; Probiotics; DSM VI; Psychiatry; Gut microbiota; Therapeutic alliance

Introduction

This case report concerns a young 19-year-old boy who, after the sudden death of his father in a serious road accident, a death for which he felt responsible even though he was not at fault, fell into a deep depression, diagnosed by the psychiatrist as major

depression according to DSM V [1]. In fact, since the day of his father’s death, he persisted for most of the day in a very marked depressed mood with thoughts of suicide, marked lack of interest in any activity, including the more pleasant ones such as going out with friends or playing sport, hypersomnia during the day and insomnia with difficulty falling asleep at night, a very marked sense of guilt concerning his father’s premature death, an inability to maintain concentration when reading books or newspapers, and a marked loss of appetite even for his favourite foods.

Depressed mood for most of the day
Marked disinterest and lack of pleasure in normal daily activities
Significant weight loss or changes in appetite (significant increase or decrease)
Persistent insomnia or hypersomnia
Psychomotor agitation or slowing of motor skills
Feeling of fatigue or loss of energy
Low self-esteem or excessive feelings of guilt
Decreased attention and concentration capacities
Recurrent thoughts of death, suicidal ideation or suicide attempts

Table 1: Symptoms Indicating Major Depression According To Dsm V.

Treatment

The patient, on the advice of the family and the attending physician, started a psychotherapeutic course with the NHS psychiatrist, who prescribed, following the guidelines [2-5]: Fluoxetine 20 mg/day, a serotonin re-uptake inhibitor (SSRI) drug, combined with a tienodiazepine, Ethylazolam 1 mg at night before going to sleep, a therapy that the boy refused to take because he did not want to take psychotropic drugs of any kind, however he accepted the weekly psychotherapy meetings. The family, worried about the boy and his future, decided to hear another opinion and turned to us to evaluate a therapy that could help the boy and was accepted and well tolerated by him. Talking to the boy, it is decided to absolutely continue the psychotherapy sessions, he is advised to take up cycling, his favourite sport and his lifelong passion, and he is prescribed, following the most recent discoveries and evidence [6-12], and having assessed his inflammatory indices (especially CRP and IL-6) [13,14] through haematochemical examinations, an anti-inflammatory drug combined with probiotics, with this dosage ibuprofen 400mg every morning upon waking, vitamin D3-cholecalciferol 100mcg in the evening after dinner, combined with vitamin K2 60mcg after breakfast on alternate mornings, and a probiotic containing the following strains: Bifidobacterium lactis W51, Bifidobacterium lactis W52, Enterococcus faecium W54, Lactobacillus acidophilus W22, Lactobacillus paracasei W20, Lactobacillus plantarum W21, Lactobacillus salivarius W24, Lactococcus lactis W19, 80mg in the morning at breakfast, and 80mg in the evening at dinner, all to be taken for 14 consecutive days, until the next follow-up visit. After the 14 days have passed, the boy returns for his check-up visibly improved, he is beginning to grieve, and is slowly overcoming his sense of guilt, realising thanks to psychotherapy that he is not to blame. He reports that he feels better since taking the recommended therapy, he does not

complain of any discomfort related to side effects, he feels more lucid, less apathetic and less depressed, and with more desire to do. He has taken up cycling again and rides about 50 km three times a week, and is considering enrolling at university, perhaps working part-time as a waiter or clerk in some shop or restaurant. It is therefore decided to continue the therapy for another 14 days, but reducing the dosage of ibuprofen to 400mg every other day. Follow-up visits every 14 days continued, and after the first month it was decided to further reduce the ibuprofen to 400mg two days a week (Monday and Thursday), continuing the probiotics and vitamins, arriving at the second month of treatment where it was decided to stop the ibuprofen altogether, while continuing the rest. After 3 months of treatment and psychotherapy, the first month one meeting a week, then two meetings a month, the boy visibly improved, no longer showing any obvious symptoms of major depression, so it was decided to schedule monthly internist check-ups, and 6 months after his father's death the boy could be declared completely cured, having returned to a normal life and even enrolled at university, faculty of medicine and surgery, passing the admission test.

Conclusions

This clinical case is intended to emphasise how important the therapeutic alliance with the patient is, especially in mood disorders, and how important it is to act on inflammation and the intestinal microbiota even in this type of disorder, with targeted therapies that are as personalised as possible.

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