A search of PubMed (https://www.ncbi.nlm.nih.gov/pubmed) for key words
"Cushing's mental health" and "depression hypercortisolism" turned up these results.

## Health-related quality of life of patients with hypothalamic–pituitary–adrenal axis dysregulations: a cohort study

*European Journal of Endocrinology*

Authors: Charlotte De Bucy , Laurence Guignat , Tanya Niati, Jérôme Bertherat and Joel Coste

https://eje.bioscientifica.com/view/journals/eje/177/1/1.xml

## Cases of Psychiatric Morbidity in Pediatric Patients After Remission of Cushing Syndrome

*Pediatrics*

Authors: Margaret F. Keil, Alan Zametkin, Celia Ryder, Maya Lodish, Constantine A. Stratakis

https://pediatrics.aappublications.org/content/137/4/e20152234.long

## Quality of Life in Cushing's disease: A long term issue?

*Annals of Endocrinology*

Authors: Susan M. Webb, Alicia Santos, Eugenia Resmini, Maria-Antonia Martínez-Momblán, Luciana Martel, Elena Valassi

http://diposit.ub.edu/dspace/bitstream/2445/126753/1/683333.pdf

## Psychiatric Symptoms in Patients with Cushing's Syndrome: Prevalence, Diagnosis and Management.

*Drugs*

Authors: Santos A, Resmini E, Pascual JC, Crespo I, Webb SM.

https://www.deepdyve.com/lp/springer-journal/psychiatric-symptoms-in-patients-with-cushing-s-syndrome-prevalence-3l0GV0VvfV?key=springer

*(this last article requires a 14 day free trial membership to read in its entirety; we've summarized it on the following page if you don't feel like doing this but would still like to know more about the article!)*

*SUMMARY*

# Psychiatric Symptoms in Patients with Cushing's Syndrome: Prevalence, Diagnosis and Management.

*Drugs*

Authors: Santos A, Resmini E, Pascual JC, Crespo I, Webb SM.

This research looked at almost 100 articles in the scientific literature to assess how psychiatric symptoms in Cushing's are addressed. The majority of patients will experience depression and/or anxiety, but many will also have other psychiatric disturbances. The authors highlight the benefit of diagnosing, monitoring, and treating patients with psychiatric symptoms as part of a multidisciplinary approach to the treatment of hypercortisolism.

Patients with excess cortisol tend to have hypertension and other cardiovascular effects, obesity, diabetes, blood and bone disorders, and cognitive/neuropsychological impairment. Even after successful treatment, some of these co-morbidities can stick around short- or long-term. Patients seem more predisposed to these effects if they are older and female with severe hypercortisolism. Although there is plenty of evidence to prove that patients continue to experience physical and psychiatric symptoms of overproduction of cortisol even after remission, there is very little data for now about the management of the psychiatric elements.

Depression is the most commonly reported psychiatric co-morbidity. Some researchers conclude that it can be considered an early manifestation of Cushing's since 50-80% of patients report it as a symptom. Anxiety is the second most prevalent at approximately 50%. Low libido is reported in more than half of patients, and over 80% report irritability. Bipolar disorder and psychotic events are less common. Remission brings resolution of some of the effects, but even mild symptoms interfere with daily tasks, healthy habits, compliance, etc.

Psychiatric diagnosis is not easy to establish and should be performed by specialists. Many clinicians will use screening questionnaires to establish diagnosis and monitor for improvement. Normalization of high cortisol could take a long time, so it is important to address psychiatric concerns early rather than assuming they will resolve once cortisol has been successfully lowered. One benefit to including mental health as a priority on the road to recovery is a sense of control in a time when many things happening in the body feel out of our control.

The authors came up with an algorithm to address the management of depression and anxiety in Cushing's patients. Screening tools should be used to determine if symptoms would score low, moderate, or severe. Low scores would suggest regular monitoring, while moderate and high would suggest benefit from a psychiatric evaluation. Four examples of screening questionnaires are the Beck Depression Inventory II (BDI-II), the Center for Epidemiologic Studies Depression rating scale (CES-D), the Hamilton Rating Scale for Depression (HDRS), and the Zung Self-rating Depression Scale (SDS). As these are self-reported, you can fill them out at home to get a feel for where you stand clinically; they can then be used as a tool to discuss mental health with your doctor.

BDI-II CES-D HDRS SDS

**BDI-II** http://www.midlothianwellness.com/images/stories/pdf/bdi-ii.pdf
**CES-D** http://www.chcr.brown.edu/pcoc/cesdscale.pdf
**HDRS** https://dcf.psychiatry.ufl.edu/files/2011/05/HAMILTON-DEPRESSION.pdf
**SDS** http://www.mentalhealthministries.net/resources/flyers/zung_scale/zung_scale.pdf