Mania & bipolar depression

Description

Saving this to a “Health” email folder may make access easier.

You can use this as an aide to your own research and share with your doctor as appropriate.

You can use drugs.com or other trusted health websites to look up the latest information on prescription drugs, herbs, foods or other treatments possible side & interaction effects.

What helps bipolar mania & depression the most?

Psychotherapy

Lithium orotate/aspartate

Spirulina’s EPA & DHA omega3 fatty acids for bipolar disorder

Ketamine for unipolar & bipolar depression

N-acetylcysteine (NAC)

Modafinil (Provigil) & Armodafinil (Nuvigil)

Ashwaganda

Alpha-linolenic acid (ALA)

Anti-inflammatories

Avoiding gluten

Bipolar

Supplements & medications

Because mania management is so important, and a manic episode can turn people's life upside down, all supplements & medications proposed need to be screened in multiple ways. They need to be checked to see if they increase serotonin, which can trigger a manic episode if they aren't on lithium. They need to be checked to see what people with bipolar disorder have reported is their experience with them directly. They need to be checked against any meds that are currently stabilizing the disorder & preventing mania so it doesn't affect their blood levels & cause a change in the medical management. This can usually be done in an internet search engine by typing in the name of the drug or supplement & "bipolar" or "serotonin" or the name of the drug that is already being taken to stabilize the disorder & prevent mania.

Dialectical behavioral therapy (DBT)

DBT originally was used to treat borderline personality disorder but has expanded to many other, including bipolar disorder. It appears to be very effective in dealing with strong, even painful, emotions.

Lithium carbonate

Of all the prescription medications approved for bipolar, lithium carbonate appears to lower the incidence of manic episodes and suicidal ideation most effectively and consistently over time.

The effects of lithium were discovered because most water has natural lithium salts. Places that have the highest levels of lithium salts have much around 40% less suicides, homicides & violent crime in general.

Lithium carbonate is available by prescription for treating & preventing the manic episodes in bipolar disorder. It is often used at 2000mg/day. It can cause kidney failure at effective dosages, so for some its therapeutic window is limited until it causes too much kidney damage. Doctors often use lower dosages than fully effective and combine it with other drugs that have shown some effectiveness.

Kidney (renal) toxicity is common over time with regular lithium use. Nephrogenic diabetes insipidus, kidney damage, and hypothyroidism are consequences.

Combination effects

Thiazide and loop diuretics may significantly increase lithium levels and must be monitored if both medications are essential.

Angiotensin-converting enzyme (ACE) inhibitors may increase lithium levels.

Nonsteroidal anti-inflammatory drugs (NSAIDs) like aspirin, ibuprofen, naproxen etc. may increase lithium levels.

A low sodium diet may increase lithium levels.

Dehydration may increase lithium levels.

Caffeine may increase urine output and decrease lithium levels.

pro.psychcentral.com/what-to-remember-about-lithium/001595.html

Lithium and other mood stabilizers

The other mood stabilizers include valproic acid (Depakene), divalproex sodium (Depakote), carbamazepine (Tegretol) and lamotrigine (Lamictal).

Lithium and antipsychotics

Antipsychotics are sometimes used to help temporarily stabilize people with mania along with lithium. They can include olanzapine (Zyprexa), risperidone (Risperdal), quetiapine (Seroquel), aripiprazole (Abilify), ziprasidone (Geodon), lurasidone (Latuda) or asenapine (Saphris) may help.

Olanzapine (Zyprexa) taken by itself appears to increase obesity and diabetes, and when taken with lithium may increase chances of diabetes.

mayoclinic.org/diseases-conditions/bipolar-disorder/diagnosis-treatment/treatment/txc-20308001

Lithium orotate/aspartate

Lithium is present in drinking water in naturally occurring amounts. Animals that consume diets with very low lithium levels die earlier, don't reproduce as well and have behavior problems. Places that have large amounts of naturally occurring lithium have much smaller (40% less) violence and suicide rates than places that have the smallest over five countries. Positive results to higher lithium levels have been found in 9 of 11 studies. Lithium appears to increase neural growth and increase brain grey matter, perhaps better than anything else according to Dr. Nassir Ghaemi, a professor of psychiatry at Tufts University School of Medicine. Micro doses in one study helped prevent progression to Alzheimer's in people with minimal cognitive impairment.

Lithium orotate is a lithium salt and are available online without a prescription. It is bioavailable at a much lower effective dosage than lithium carbonate, and reportedly has no or much fewer side effects than lithium carbonate. Lithium carbonate is prescribed at 2000mg/day, while lithium orotate appears to have the same benefits at 20mg per day . A lot of people start taking lithium orotate after stopping

lithium carbonate because of kidney damage & they can find that 40mg lithium orotate is 2x as effective as 2000mg lithium carbonate & such a lower dosage that their kidneys heal up while on the low dose lithium orotate or lithium chloride.

It is good to research the apparent improved safety and greater efficacy profile of lithium orotate or lithium chloride vs carbonate. Many people take it during the day after a meal for full ingestion but also to help insomnia before bedtime or upon awakening. It doesn't seem to cause sleepiness during the day but appears to help sleep at night.

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en.wikipedia.org/wiki/Lithium_orotate

Lithium Orotate – Herbal Miracle or Internet Snake Oil?

bipolar-lives.com/lithium-orotate.html

Psychotherapy

Intensive psychotherapy appears to improve symptoms in bipolar by 60%. Family focused treatment including cognitive behavioral, interpersonal and social rhythm therapy can reduce hospitalizations by 80% (5X lower). Dialectical behavioral therapy has also been found very effective for many previously difficult to treat disorders. Social rhythm therapy focuses on the sleep & wake cycle & how it can influence manic/depressive stages. When people don’t get enough sleep their serotonin levels rise, which for people who have bipolar disorder can trigger and maintain a manic episode. Getting enough sleep every night can prevent manic episodes. Getting 10hrs of sleep nightly has been shown to help prevent and reverse manic episodes. That is because a lack of sleep increases serotonin in the brain which in people with bipolar can cause a manic episode where the mania increases as the lack of sleep increases serotonin levels higher & higher.

Sleep aides

When we don’t get enough sleep our serotonin levels increase, which for people with bipolar illness can trigger a manic episode. Getting enough sleep helps to prevent & treat bipolar episodes. Benzodiazepenes are useful to help to stop a manic episode, but because people develop tolerance &

addiction to them they are not as useful to prevent manic episodes.

Herbs for anxiety & sleep

Herbs like kava, valerian, chamomile, lemon balm, passionflower

Because they don't cause motor incoordination, addiction, or respiratory depression they can be used in combination. The key for me is to try them one at a time then use the one that works best & then add the others when the usual one isn't enough, or when more sleep is needed to curb an oncoming manic episode. Some people & researchers consider nonaddictive sleep aides as the key to preventing & stopping manic episodes.

Glycine, theanine, GABA

The amino acids glycine, theanine, & GABA help anxiety during the day & really help deepen & lengthen sleep in people with insomnia. Because they are amino acids that are already throughout our body & in our food, people usually don't have any side effects when taking them for sleep.

alienherbalist.com/anxiety-insomnia-stress-aides/

http://www.alternativementalhealth.com/articles/aminobipolar.htm

Spirulina for omega-3 eicosapentaenoic acid (EPA) & docosahexaenoic acid (DHA) fatty acids

There's one antidepressant which not only apparently doesn't increase manic episodes, but which has reduced both manic & depressive episodes. It also boosts concentration. Fish get their omega-3 EPA & DHA fatty acids from eating an algae called spirulina. People taking spirulina as a supplement may have to take it with a meal with a vegetable. EPA & DHA fatty acids are considered so important to mood & thinking that spirulina is put into almost every infant formula to try to make it closer in cognitive & developmental benefits to breast milk (www.ovega.com).

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Spirulina’s EPA & DHA omega3 fatty acids for bipolar disorder

Low EPA & DHA levels are associated with increased manic & depressive episodes, while EPA & DHA fatty acids supplementation appears to reduce manic and depressive episodes in people with bipolar illness as reported in numerous studies & meta-analyses. The strongest evidence is for reducing & preventing depression in bipolar disorder, then for not triggering mania as serotonin antidepressants can do, then for preventing mania, & least for treating a manic episode. It has not been shown to trigger suicide ideation like the serotonin antidepressants and has a high safety profile.

Clin Psychopharmacol Neurosci. 2015 Aug; 13(2): 129–137.

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PMCID: PMC4540034

Omega-3 Polyunsaturated Fatty Acids in Prevention of Mood and Anxiety Disorders

Kuan-Pin Su, Yutaka Matsuoka, and Chi-Un Pae

Plasma free polyunsaturated fatty acid levels are associated with symptom severity in acute mania.

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McNamara RK et al.

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DHA deficiency and prefrontal cortex neuropathology in recurrent affective disorders.

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A meta-analytic review of polyunsaturated fatty acid compositions in patients with depression.

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Selective deficits in the omega-3 fatty acid docosahexaenoic acid in the postmortem orbitofrontal cortex of patients with major depressive disorder.

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Am J Clin Nutr. 2003 Jul; 78(1):40-6.

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http://www.blackdoginstitute.org.au/docs/Omega-3asaTreatmentforBipolarDisorder-PrintVersionofMainPresentation.pdf

http://itsnotmental.blogspot.com/2008/02/omega-3-fatty-acids-fish-oil-dha-epa.html

http://www.forbes.com/sites/daviddisalvo/2012/09/16/does-fish-oil-really-improve-mental-health/

Spirulina vs fish oil

The reason organic spirulina (which needs to be taken in a meal with a vegetable) is preferred over fish oil is because it is far cheaper & doesn't cause the fish oil taste after burping. While it is expensive per pound it only takes a 1/4 teaspoon twice a day to get noticeable benefits, and perhaps 1/2 teaspoon (estimated) twice a day for people with bipolar disorder, which makes it very inexpensive per dose. According to Consumer Reports, because we have less than 10% of fish left and many species are near extinct, 70% of the fish sold is a different species than advertised. When adding to this the mercury, pesticide, and (now with Fukishima) the radiation contamination of fish, organic spirulina grown in a controlled environment (eaten with a vegetable) may be the far better choice.

Alpha-linolenic acid (ALA)

ALA is the third omega3 fatty acid along with EPA & DHA that is important to the brain. For people that can't have spirulina, they can make EPA & DHA fatty acids from taking ALA in flaxseed oil (2tb) or hemp oil (6tb), especially if they also take a vitamin B100 capsule (for the vitamins B3 & B6) as well as

1/2 ts vitamin C, 1/2 ts magnesium and 15mg of zinc at the same time. Flaxseed oil may also help bipolar disorder.

Bipolar Disord. 2010 Mar; 12(2): 142–154.

doi: 10.1111/j.1399-5618.2010.00799.x

Randomized, placebo-controlled trial of flax oil in pediatric bipolar disorder

Barbara L Gracious et al.

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PMCID: PMC3036554

Getting a Knack for NAC

N-Acetyl-Cysteine

Randy A. Sansone and Lori A. Sansone

epadha adhd

Neuropsychopharmacology. 2015 Sep;40(10):2298-306. doi: 10.1038/npp.2015.73. Epub 2015 Mar 19.

Reduced Symptoms of Inattention after Dietary Omega-3 Fatty Acid Supplementation in Boys with and without Attention Deficit/Hyperactivity Disorder.

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Child Adolesc Psychiatr Clin N Am. 2014 Oct;23(4):937-53. doi: 10.1016/j.chc.2014.05.010. Epub 2014 Aug 10.

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Nigg JT, Holton K.

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Clin Psychopharmacol Neurosci. 2015 Aug 31;13(2):129-37. doi: 10.9758/cpn.2015.13.2.129.

Omega-3 Polyunsaturated Fatty Acids in Prevention of Mood and Anxiety Disorders.

Su KP et al.

Red cell membrane omega-3 fatty acids are decreased in nondepressed patients with social anxiety disorder.

Green P, Hermesh H, Monselise A, Marom S, Presburger G, Weizman A

Eur Neuropsychopharmacol. 2006 Feb; 16(2):107-13.

Modafinil (Provigil) & Armodafinin (Nuvigil)

Modafinil & Armodafinil are medications used for narcolepsy & for night shift workers to stay awake. It doesn't appear to cause the irritability or addictiveness of stimulants. For people with bipolar or unipolar depression, in one review of six studies & almost 1000 people found modafinil effective for depression & fatigue for people bipolar & unipolar depression.

They give the benefits of caffeine or stimulants of mood elevation, increased concentration, & wakefulness but without the increased irritability, impulsiveness when driving (road rage), or withdrawal symptoms of depression & anxiety.

J Goss, Alexander & Kaser, Muzaffer & G Costafreda, Sergi & J Sahakian, Barbara & Fu, Cynthia. (2013). Modafinil Augmentation Therapy in Unipolar and Bipolar Depression: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. The Journal of clinical psychiatry. 74. 1101-1107. 10.4088/JCP.13r08560.

N-acetylcysteine (NAC)

NAC is a supplement available over the counter that is used to treat acetaminophen overdose, and to thin mucus in cystic fibrosis or chronic obstructive pulmonary disease (COPD). NAC appears to significantly reduce the symptoms of bipolar mania and depression in studies, as well as autism, Alzheimer's disease, cocaine and cannabis addiction, trichotillomania, nail biting, skin picking, obsessive-compulsive disorder, schizophrenia, drug-induced neuropathy and progressive myoclonic epilepsy and helping recovery from brain injury.

Aust N Z J Psychiatry. 2013 Jun;47(6):564-8. doi: 10.1177/0004867413481631. Epub 2013 Mar 14.

A preliminary investigation on the efficacy of N-acetyl cysteine for mania or hypomania.

Magalhães PV, Dean OM, Bush AI, Copolov DL, Malhi GS, Kohlmann K, Jeavons S, Schapkaitz I, Anderson-Hunt M, Berk M

J Psychiatry Neurosci. 2011 Mar; 36(2): 78–86.

doi: 10.1503/jpn.100057

PMCID: PMC3044191

N-acetylcysteine in psychiatry: current therapeutic evidence and potential mechanisms of action

Olivia Dean et al.

J Affect Disord. 2011 Dec;135(1-3):389-94. doi: 10.1016/j.jad.2011.06.005. Epub 2011 Jun 29.

The efficacy of N-acetylcysteine as an adjunctive treatment in bipolar depression: an open label trial.

Berk M, Dean O, Cotton SM, Gama CS, Kapczinski F, Fernandes BS, Kohlmann K, Jeavons S, Hewitt K, Allwang C, Cobb H, Bush AI, Schapkaitz I, Dodd S, Malhi GS

Rev Bras Psiquiatr. 2011 Dec;33(4):374-8.

N-acetylcysteine for major depressive episodes in bipolar disorder.

Magalhães PV, Dean OM, Bush AI, Copolov DL, Malhi GS, Kohlmann K, Jeavons S, Schapkaitz I, Anderson-Hunt M, Berk M

Innov Clin Neurosci. 2011 Jan; 8(1): 10–14.

PMCID: PMC3036554

Getting a Knack for NAC

N-Acetyl-Cysteine

Randy A. Sansone and Lori A. Sansone

Biol Psychiatry. 2008 Sep 15;64(6):468-75. doi: 10.1016/j.biopsych.2008.04.022. Epub 2008 Jun 5.

N-acetyl cysteine for depressive symptoms in bipolar disorder–a double-blind randomized placebo-controlled trial.

Berk M, Copolov DL, Dean O, Lu K, Jeavons S, Schapkaitz I, Anderson-Hunt M, Bush AI

J Affect Disord. 2011 Mar;129(1-3):317-20. doi: 10.1016/j.jad.2010.08.001. Epub 2010 Aug 30.

N-acetyl cysteine add-on treatment for bipolar II disorder: a subgroup analysis of a randomized placebo-controlled trial.

Magalhães PV, Dean OM, Bush AI, Copolov DL, Malhi GS, Kohlmann K, Jeavons S, Schapkaitz I, Anderson-Hunt M, Berk M.

Neuroscience & Biobehavioral Reviews

Volume 55, August 2015, Pages 294–321

Clinical trials of N-acetylcysteine in psychiatry and neurology: A systematic review

Deepmala et al.

doi:10.1016/j.neubiorev.2015.04.015

Journal of Affective Disorders

Volume 129, Issues 1–3, March 2011, Pages 317–320

N-acetyl cysteine add-on treatment for bipolar II disorder: a subgroup analysis of a randomized placebo-controlled trial

P.V. Magalhãesa et al.

Biological Psychiatry

Volume 64, Issue 6, 15 September 2008, Pages 468–475

Neurostimulatory and Neuroablative Treatments for Depression

N-Acetyl Cysteine for Depressive Symptoms in Bipolar Disorder—A Double-Blind Randomized Placebo-Controlled Trial

Michael Berk et al.

Anti-inflammatories

Anti-inflammatory Cox-2 inhibitor herbs like ginger, resveratrol, palmitoylethanolamide (PEA), boswellia, papain, & bromelain may help people with bipolar disorder disorder by lowering inflammation associated with manic symptoms. Turmeric is an anti-inflammatory that may raise mood by increasing serotonin so may need to be avoided in people with bipolar disorder, but there are few reports (0.1%) of mania triggered by curcumin to the FDA vs other side effects.

Seven people with bipolar disorder reported a calming of their thoughts on resveratrol.

http://bipolar-story.com/bipolar-stories-and-insights/resveratrol/

http://www.longecity.org/forum/topic/23511-resveratrol-and-mood-disorders/

http://www.ehealthme.com/ds/turmeric/mania/

Front. Endocrinol., 24 May 2016 | https://doi.org/10.3389/fendo.2016.00044

Resveratrol Ameliorates the Anxiety- and Depression-Like Behavior of Subclinical Hypothyroidism Rat: Possible Involvement of the HPT Axis, HPA Axis, and Wnt/?-Catenin Pathway

Jin-Fang Ge et al.

Dickerson F, Stallings C, Origoni A, et al. Elevated serum levels of C-reactive protein are associated with mania symptoms in outpatients with bipolar disorder. Prog Neuropsychopharmacol Biol Psychiatry. 2007;31(4):952-955.

http://www.neurologyreviews.com/the-publication/past-issue-sngle-view/mania-is-linked-to-increased-levels-of-three-immune-markers/b24f9d08a95186c30586da2470c8babc.html

http://www.sciencedirect.com/science/article/pii/S0165032712000092

http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0073520#pone-0073520-g002

Ashwaganda

The adaptogen & stress reliever ashwaganda appears to improve cognitive function in people with bipolar disorder.

J Clin Psychiatry. 2013 Nov;74(11):1076-83. doi: 10.4088/JCP.13m08413.

Randomized placebo-controlled adjunctive study of an extract of withania somnifera for cognitive dysfunction in bipolar disorder.

Chengappa KN, Bowie CR, Schlicht PJ, Fleet D, Brar JS, Jindal R.

Ashwaganda was not reported in the above study as triggering mania, and is suspected at having a mild effect at best in lowering at one and raising serotonin activity at another receptor sight.

https://examine.com/supplements/ashwagandha/

Gluten

Going gluten free (no wheat, rye, barley) helps some people's bipolar illness, as gluten appears to significantly increase inflammation.

Markers of gluten sensitivity in acute mania: A longitudinal study

Dickerson, Faith et al.

Psychiatry Research , Volume 196 , Issue 1 , 68 – 71

DOI: http://dx.doi.org/10.1016/j.psychres.2011.11.007

Bipolar Disord. 2014 May; 16(3): 230–240.

doi: 10.1111/bdi.12159

Seroreactive marker for inflammatory bowel disease and associations with antibodies to dietary proteins in bipolar disorder

Emily G. Severance et al.

Bipolar Disord. 2011 Feb;13(1):52-8. doi: 10.1111/j.1399-5618.2011.00894.x.

Markers of gluten sensitivity and celiac disease in bipolar disorder.

Dickerson F, Stallings C, Origoni A, Vaughan C, Khushalani S, Alaedini A, Yolken R.

Psychiatry Res. 2012 Mar 30;196(1):68-71. doi: 10.1016/j.psychres.2011.11.007. Epub 2012 Mar 3.

Markers of gluten sensitivity in acute mania: a longitudinal study.

Dickerson F, Stallings C, Origoni A, Vaughan C, Khushalani S, Yolken R.

J Pediatr. 2008 Feb;152(2):244-9. doi: 10.1016/j.jpeds.2007.06.042. Epub 2007 Nov 19.

Low prevalence of neurologic and psychiatric manifestations in children with gluten sensitivity.

Ruggieri M, Incorpora G, Polizzi A, Parano E, Spina M, Pavone P.

Ketamine for unipolar & bipolar depression

Ketamine is an anesthetic (used frequently in emergency rooms or in palliative pain care) that when IV infused by a doctor at 1/10th the anesthetic dose appears to often relieve even suicidal depression within minutes or hours for up to 75% of people studied (using an IV infusion), much higher than any other legal antidepressant studied. It may also promote a sense of social connection often missing in people struggling with depression.

It is not the ketamine that appears to have the antidepressant effect, but one form of a metabolite (hydroxynorketamine) called (2R,6R)-HNK. This metabolite appears to activate a glutamate receptor-?-amino-3-hydroxy-5-methyl-4-isoxazole propionic acid (AMPA), not inhibit NDMA receptors

NMDAR inhibition-independent antidepressant actions of ketamine metabolites . Zanos P. et al. Nature. 2016 May 4. doi: 10.1038/nature17998. PMID:27144355.

When starting off, a singular ketamine infusion typically works immediately to relieve depression & lasts days or up to a week before the next infusion is needed. Rather than people having to come in every three to six days when the antidepressant effect wears off, most clinics now see if after the first infusion or two someone has a strong antidepressant response, then follow up with a total of four to six infusions within 2 weeks. This initial infusion schedule appears to help lengthen the time the next infusion is needed. After that people come back when they feel they need a single booster infusion, often at 3 weeks to one month. The antidepressant effect lasts for different amounts of times for different people, for weeks at a time after the first four to six infusions, but often gets longer & longer for each subsequent infusion. At first it may last for only a couple weeks, but eventually may get to where it lasts for up to six months between infusions.

Ketamine can have temporary dissociative side effects as well as increase the heart rate and/or blood pressure for the first hour, minimized by the ultralow dosage for depression.

I’ve talked with doctors in half a dozen clinics around the nation that use ketamine IV infusion for depression and they all say it works about 75% of the time, same as the studies below report. One doctor in Denver cited a study showing that four infusions over the first two weeks works as well as six, and they tried it & now reliably find it works as well as six for extending the length between when each new booster infusion is needed to three to four weeks when beginning treatment.

Below are a number of reviews of the clinical studies on ketamine IV infusion for depression.

J Clin Psychiatry. 2017 Apr;78(4):e415-e419. doi: 10.4088/JCP.17f11567.

Ketamine for Depression, 1: Clinical Summary of Issues Related to Efficacy, Adverse Effects, and Mechanism of Action.

Andrade C.

Coyle CM, Laws KR. The use of ketamine as an antidepressant: a systematic review and meta-analysis. Hum Psychopharmacol. 2015;30:152-163.

The Use of Ketamine in the Acute Management of Depression

Andrew J. Hvizdos

US Pharm. 2016;41(11):HS28-HS32.

A systematic review and meta-analysis of randomized, double-blind, placebo-controlled trials of ketamine in the rapid treatment of major depressive episodes

1. McGirr

Psychological Medicine (2015), 45, 693–704. © Cambridge University Press 2014

doi:10.1017/S0033291714001603

http://www.psychiatrist.com/_layouts/PPP.Psych.Controls/ArticleViewer.ashx?ArticleURL=/jcp/article/Page

http://www.ketamineadvocacynetwork.org/route-of-administration/

https://www.washingtonpost.com/national/health-science/a-one-time-party-drug-is-helping-people-with-deep-depression/2016/02/01/d3e73862-b490-11e5-a76a-0b5145e8679a_story.html?utm_term=.18ca68d6f3f2

http://time.com/4876098/new-hope-for-depression/

https://www.sciencealert.com/ketamine-found-to-have-an-unbelievable-effect-in-treating-severe-depression

https://www.webmd.com/depression/features/what-does-ketamine-do-your-brain#2

https://www.webmd.com/mental-health/news/20170706/ketamine-and-depression-faq

As seen in the above studies, IV infusion of ketamine for depression is the best studied with the best outcome research (75% effectiveness). Other routes of administration have been studied, just not as much.

Sublingual

Sublingual ketamine in at least one study was as effective as IV infusion (20 of 26 people with full response, 77%, and another three with moderate or partial response) in relieving depression in unipolar or bipolar depression, at a small fraction of the cost. 10mg of 100mg/ml of racemic ketamine was placed under the tongue for five minutes before swallowing (increased by 1 drop as needed in subsequent dosing later in the week). It produced rapid, clear & sustained mood, stability, cognition, & sleep improvement for a couple days to a week. People experienced only mild & transitory light-headedness & no euphoria, disassociation, or psychosis. If there was no response after a week, the dosage was raised.

If a doctor doesn't want to prescribe the liquid form, compound pharmacies can make 10mg doses that will dissolve sublingually that can be safely prescribed (because of the ultra low dosage).

One doctor I talked to said significantly higher sublingual doses eventually led to tolerance to the antidepressant effects, but other doctors have reported no problems with sublingual doses for depression.

Antidepressant, mood stabilizing and procognitive effects of very low dose sublingual ketamine in refractory unipolar and bipolar depression

Diogo R. Lara Luisa W. Bisol Luciano R. Munari

International Journal of Neuropsychopharmacology, Volume 16, Issue 9, 1 October 2013, Pages 2111–2117, https://doi.org/10.1017/S1461145713000485

Intramuscular

Intramuscular ketamine appears to work as an immediate antidepressant, but may have lower efficacy than IV infusion.

Cusin C Hilton GQ Nierenberg AA Fava M (2012) Long-term maintenance with intramuscular ketamine for treatment-resistant bipolar II depression. Am J Psychiatry 169:868–869. https://doi.org/10.1176/appi.ajp.2012.12020219

Intranasal

Intranasal ketamine appears effective as an antidepressant but with lower efficacy than IV infusion.

Lapidus KA, Levitch CF, Perez AM, et al. A randomized controlled trial of intranasal ketamine in major depressive disorder. Biol Psychiatry. 2014;76:970-976.

Oral

Oral ketamine appears to be effective but less efficacious against depression than IV infusion & takes longer to start working.

J Palliat Med. 2013 Aug; 16(8): 958–965.

doi: 10.1089/jpm.2012.0617

Daily Oral Ketamine for the Treatment of Depression and Anxiety in Patients Receiving Hospice Care: A 28-Day Open-Label Proof-of-Concept Trial

Scott A. Irwin et al.

J Palliat Med. 2010 Jul;13(7):903-8. doi: 10.1089/jpm.2010.9808.

Oral ketamine for the rapid treatment of depression and anxiety in patients receiving hospice care.

Irwin SA, Iglewicz A.

J Clin Psychopharmacol. 2017 Aug;37(4):464-467. doi: 10.1097/JCP.0000000000000717.

Oral Ketamine in Treatment-Resistant Depression: A Clinical Effectiveness Case Series.

Al Shirawi MI, Kennedy SH, Ho KT, Byrne R, Downar J.

Efficacy and safety of oral ketamine versus diclofenac to alleviate mild to moderate depression in chronic pain patients: A double-blind, randomized, controlled trial

Jafarinia, Morteza et al.

Journal of Affective Disorders , Volume 204 , 1 – 8

Ketamine for bipolar depression

Ketamine given by IV infusion, intramuscular injection, & sublingually has been used for people with bipolar disorder without apparently triggering manic episodes. The same percentage of people with bipolar depression (75%) found immediate relief with ketamine infusions as unipolar depression,

including from suicidal ideation.

Antidepressant, mood stabilizing and procognitive effects of very low dose sublingual ketamine in refractory unipolar and bipolar depression

Diogo R. Lara Luisa W. Bisol Luciano R. Munari

International Journal of Neuropsychopharmacology, Volume 16, Issue 9, 1 October 2013, Pages 2111–2117, https://doi.org/10.1017/S1461145713000485

Cusin C Hilton GQ Nierenberg AA Fava M (2012) Long-term maintenance with intramuscular ketamine for treatment-resistant bipolar II depression. Am J Psychiatry 169:868–869. https://doi.org/10.1176/appi.ajp.2012.12020219

Biol Psychiatry. 2012 Jun 1;71(11):939-46. doi: 10.1016/j.biopsych.2011.12.010. Epub 2012 Jan 31.

Replication of ketamine's antidepressant efficacy in bipolar depression: a randomized controlled add-on trial.

Zarate CA Jr, Brutsche NE, Ibrahim L, Franco-Chaves J, Diazgranados N, Cravchik A, Selter J, Marquardt CA, Liberty V, Luckenbaugh DA.

A Randomized Add-on Trial of an N-methyl-D-aspartate Antagonist in Treatment-Resistant Bipolar Depression

Nancy Diazgranados et al.

Arch Gen Psychiatry. 2010;67(8):793-802. doi:10.1001/archgenpsychiatry.2010.90

Sarah E. Grady, Travis A. Marsh, Allison Tenhouse, and Kelsey Klein (2017) Ketamine for the treatment of major depressive disorder and bipolar depression: A review of the literature. Mental Health Clinician: January 2017, Vol. 7, No. 1, pp. 16-23.

https://doi.org/10.9740/mhc.2017.01.016

https://www.medscape.com/viewarticle/768859

https://ktcpartnership.com/2016/10/bipolar-disorder-lithium-ketamine-need-know/

Cost

Each IV infusion can cost between $300 to $1500, and may not be covered by insurance. Intramuscular injection, oral, intranasal, or sublingual are usually much cheaper, but efficacy may be lower on average than with IV infusion. Oral & sublingual can be as low as $40 a month through a compound pharmacy.

Insurance

In some areas around 35% of people get some reimbursement by their insurance company for the treatment. In making an argument to the insurance company, the advantages are there is no waiting two months of daily usage (like the serotonin antidepressants) to see if it works- if it doesn't work after the first two infusions people don't usually get more. And after the initial four to six infusions in the first two weeks, many people find that each single booster infusion may start at 3-4 weeks but may eventually stretch as long as every six months, so yearly treatment may become cheaper over time. Ketamine IV infusion is far cheaper than hospitalization.

Clinics recommend engaging the insurance company before starting treatment so if they do eventually decide to cover it, it will be retroactive to the first. You can ask the clinic for a insurance friendly full receipt you can forward to attempt getting reimbursement starting with the first treatment.

Here is a pain clinic willing to do a ketamine IV infusion for depression:

Center for Pain Management

533 E County Line Rd, Greenwood, IN 46143

8AM–4:30PM (317) 706-7246

$1k (minimum price if insurance doesn't pay) to $5k per infusion

Sublingual/intranasal ketamine

Sublingual ketamine is often prescribed in liquid form through a compounding pharmacy, 50mg/ml, 0.2mg to 1ml once daily, with 30ml being one month supply. As a nasal spray it is often prescribed 125mg/ml, with one spray each nostril at bedtime, and up to 2 as needed if dosage needs to be increased.

Dr. Dave Miller

Keystone Pharmacy (Compounding)

4021 Cascade RD SE, Suite 50

Grand Rapids, MI 49546

616-974-9792

hypnosis

meditation

delta binaural beats

near infrared light

grounding

vits Bs complex

Bipolar & Vitamin D3

People with bipolar depression or schizophrenia are much more likely to have low vitamin D3 levels. T he optimal blood levels of vitamin D3 for people appears to be at least 75ng/ml. That was the level people lived the longest in a 47 year study on longevity. High vitamin D3 levels lower depression, anxiety, & mania. People often start with vitamin D3 drops under the tongue at 1000IU per day for a couple weeks, then 2000IU, then 3000IU up to 10,000IU (250mcg).

Vitamin D3 increases calcium absorption, & vitamin K2 keeps the calcium out of the arteries & into the bones & teeth. For every 250mcg of vitamin D3, 100mg of vitamin K2 has been shown to prevent increased calcium levels, the only problem for very high vitamin D3 intake like 2.5g (100,000IU) daily with 1g of vitamin K2.

After a month at 250mcg daily under the tongue levels can be tested to see if 75ng/ml is reached. For people who have autoimmune disorder, increasing dosage every two weeks to see if getting levels high enough reverses almost all autoimmune symptoms.

Vitamin D3 Supplemental Treatment for Mania in Youth with Bipolar Spectrum Disorders

Elif M. Sikoglu et al.

J Child Adolesc Psychopharmacol. 2015 Jun 1; 25(5): 415–424.

doi: 10.1089/cap.2014.0110

A Major Qualifying Project Report Submitted to the Faculty of

WORCESTER POLYTECHNIC INSTITUTE by Kaitlyn Schneider March 6, 2014

https://web.wpi.edu/Pubs/E-project/Available/E-project-030614-131613/unrestricted/MQP_KaitlynSchneider_final.pdf

Prevalence of vitamin D deficiency in adult outpatients with bipolar disorder or schizophrenia.

Boerman R, Cohen D, Schulte PF, Nugter A.

J Clin Psychopharmacol. 2016. doi: 10.1097/JCP.0000000000000580

Notes on supplements for bipolar

theanine- for mood & anxiety no agreement increase or decrease

dopamine & gaba

lavender oil- may increase serotonin, lots of people using it for sleep with bipolar

holy basil- lots using for stress & bipolar

rhodioloa & ginseng- appear to stimulate mania

schizandra- may not trigger mania

lemon oil- serotonin, norepinephrine, dopamine

magnesium- helps mood

probiotics- helps mood

turmeric- serotonin & dopamine

rhodiola- serotonin

5htp may deplete norepinephrine & dopamine

triptophan- serotonin

SAMe- serotonin, dopamine, acetylcholine helps depression, Parkinsons & schizophrenia, liver, osteoarthritis

bebrainfit.com/serotonin-supplements/

honey- has tryptophan helps sleep

melatonin- serotonin

valerian- serotonin

gaba- may enhance serotonin

magnolia bark- may lower serotonin

chamomille- serotonin

glycine- serotonin

lemon balm- may inhibit serotonin

passionflower- not seen

vanadium- mania

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Midwest Ketamine Center

1640 North Arlington Heights Road

Suite 101

Arlington Heights, IL 60004

info@midwestketaminecenter.com

Office: (224) 232-8910

Fax: (224) 232-8920 $500, $350 nebulizer

info@ChicagoIVSolution.com

IV Solution and Ketamine Center of Chicago

712 North Dearborn Street

Chicago, Illinois 60654\

Phone: 844-9-IV-MEDS 844.948.6337

$600 per

THE NEUROSCIENCE CENTER

440 LAKE COOK ROAD, BUILDING 2, DEERFIELD, IL 60015 · OFFICE#: 847-236-9310

$850 infusion & TMS Dr. Buss

infrared

hyperbaric 10 treat mono $165 if get 10,$250 if one, multi $25

Pain Therapy Associates

847-352-5511

4753 N. Broadway St, Suite 1025, Chicago IL 60640

$850 first, $600 after

Center for Pain Management

533 E County Line Rd, Greenwood, IN 46143

8AM–4:30PM (317) 706-7246

yes ketamine

$1k (minimum price if insurance doesn’t pay) to $5k (if insured) per infusion

Category

1. Uncategorized

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biggs