Atypical Depression

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Abstract—Psychotherapy is the central pillar in the treatment of atypical depression. Medication can be supportive, but it is mostly the communication between patient and therapist which brings about the needed change, and thereby leads to a reduction in symptoms. An empathic approach which is directed at helping the patient understand and change the own internal and external communication patterns used in interactions with oneself and others is fundamental in bringing about more permanent improvements. Communication-Focused Therapy (CFT), as developed by the author, can provide several techniques and a cohesive theoretical framework in this regard.

Index Terms—atypical depression, AD, depression, communication-focused therapy, CFT, psychotherapy, medication, treatment, psychiatry

I. INTRODUCTION

ATYPICAL DEPRESSION is a diagnosis that is often overlooked. It refers to a depressive state where individuals experience improved mood when encountering pleasurable events. This type of major depression, or dysthymia, is atypical of melancholic depression, where mood improvements from positive situations do not typically manifest in affected individuals.

Depression is one of the most prevalent mental disorders, affecting some 121 million people worldwide. Atypical depression accounts for 15–40% of depression cases, and among its key features are the reversed somatic-vegetative symptoms of hyperphagia and hypersomnia (APA, 2013; Grant et al., 2009; Quitkin, 2002).

Atypical depression is over two times more common in women than men and is more chronic with an average earlier onset than melancholic depression. An increased risk of suicide and anxiety disorders is present with atypical depression. Depression in general increases the risk of suicide by 20 times and is among the leading causes of disability.

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According to the World Health Organization (WHO) data, by the year 2020, depression will be the second most common cause of disease and premature death worldwide. (Murray, 1997) Identifying the atypical subtype of depression in terms of clinical and biological features would give patients a chance for personalized treatment. (Korte, 2015)

According to the diagnostic criteria of DSM-5 (American Psychiatric Association, 2013), atypical depression is characterized by experiencing frequent swing in mood, resulting from "mood reactivity," and having heavy, leaden feelings in arms and legs, that is, "leaden paralysis." In contrast, the patients diagnosed to have melancholic depression present severe depression in a chronic form, caused by excessive guilt or the like.

Atypical Depression is defined as a subtype of Major Depressive Disorder with Atypical Features, characterized by:

- 1. Mood reactivity (i.e., mood brightens in response to actual or potential positive events)
- 2. At least two of the following:
 - Significant weight gain or increase in appetite;
 - Hypersomnia (sleeping too much, as opposed to the insomnia present in melancholic depression);
 - Leaden paralysis (i.e., heavy, leaden feelings in arms or legs);
 - Long-standing pattern of interpersonal rejection sensitivity (not limited to episodes of mood disturbance) that results in significant social or occupational impairment.
- 3. Criteria are not met for With Melancholic Features or With Catatonic Features during the same episode.

Although in 1982 Davidson et al claimed that "atypical depression is poorly defined", a recent review of Stewart et al (2009) argues for this clinical phenomenon as a valid entity. Better specification of diagnostic criteria and description of the clinical picture of AD taking into account the age of onset and the course would be required. Also, AD should have a proper place in the ICD-11. Further research on the neurobiology of AD is also needed, for example, the genome-wide association study. New pathogenic findings may broaden the biological

characteristics of AD which may pave the way to a more specific treatment.

An exploratory study by Arnow et al (2015) revealed substantial overlap among anxious, atypical, and melancholic depression subtypes, a finding consistent with observations from the STAR*D data set. Whether pure or mixed, subtypes were not differentially predictive of overall acute treatment outcomes or differentially predictive of efficacy among the three antidepressant medications. If replicated, these findings would suggest that the clinical utility of these subtypes in treatment selection is minimal.

Adults with atypical depression, compared to those with nonatypical depression, have higher rates or levels of several cardiovascular risk factors, including dyslipidemia, hypertension, diabetes, obesity, metabolic syndrome, physical inactivity, and systemic inflammation (Chou & Yu, 2013; Cizza et al., 2012; Glaus et al., 2013; Hickman, Khambaty, & Stewart, 2014; Lamers et al., 2013; Lasserre et al., 2014; Levitan et al., 2012; Niranjan, Corujo, Ziegelstein, & Nwulia, 2012; Rudolf, Greggersen, Kahl, Huppe, & Schweiger, 2014; Takeuchi, Nakao, Kachi, & Yano, 2013; van Reedt Dortland et al., 2010).

Major Depression

The relations of melancholic depression with atypical depression have been studied (Rodgers et al., 2016), and it has been pointed out that the clinical pictures of the patients with atypical depression are considerably different from those of the patients with melancholic depression (Singh & Williams, 2006). The patients with atypical depression do not show chronic depression unlike the patients with melancholic depression (American Psychiatric Association, 2013).

Bipolar Disorder

Individuals experiencing bipolar I, bipolar II, cyclothymia, and seasonal affective disorder are more likely to also experience atypical depression. As the associations demonstrated between AD and bipolar depression may have therapeutic consequences, in each AD patient, a test for bipolarity should be performed (eg, by means of the Mood Disorder Questionnaire (Hirschfeld, 2000) or Hypomania Checklist-32 scale (Angst et al, 2005)). In the event of a positive result, an attempt to use a drug with antidepressant and mood-stabilizing properties such as lithium, lamotrigine, quetiapine, or lurasidone can be made. Also, because patients with atypical features of depression become obese more frequently (Buzuk et al, 2016) and have a resistance to leptin, (Milaneschi et al, 2017) drugs which do not influence appetite and body mass should be taken into account.

Borderline Personality Disorder

Patients with atypical depression and those with borderline personality disorder (BPD) show some similarities in the clinical pictures and the attitudes (Perugi et al., 1998; Perugi & Akiskal, 2002), which has led some investigators to the assumption that atypical depression may stem from the problem of patient's personality. However, since medication and psychotherapy work quite similarly in major depression and atypical depression, as will be discussed below, and atypical depression is more about mood than emotional instability, important questions about the possible links between BPD and AD remain unanswered.

Not 'Laziness'

Atypical depression is one of the mental diseases often mistaken for idleness and dependence, which can lead to conflicts particularly in young people, when neither the patient nor the parents recognize the illness and blame the symptoms on laziness or a 'self-afflicted' lack of motivation.

A patient with atypical depression, for example, may lack the motivation to work or study, but may enjoy a rewarding event, such as dating, without indicating a depressive mood. Such clinical pictures of the patients with atypical depression may occasionally be mistaken for the signs of idleness and dependence (Denda, 2009).

II. MEDICATION

In 2006, a meta-analysis was published for the pharmacological treatment of depression with atypical features. Only eight publications met the criteria for a double-blind, controlled condition and an operational diagnosis of AD, according to DSM. For the comparison of MAOI (including reversible ones) and tricyclic antidepressants, an effect size was 0.27, suggesting a better efficacy of the former, while for MAOI and SSRI, such an effect was negligible (0.02), indicating a lack of differences in efficacy. (Husain et al, 2008) . Cuijpers et al (2017) found that the distinction of major depression and atypical depression was not a predictor to antidepressant treatment.

In the International Study to Predict Optimized Treatment in Depression (iSPOT-D), including patients treated with escitalopram, sertraline, or venlafaxine, three subtypes of patients were delineated: patients with melancholic, atypical, and anxious depression. Thirty-nine percentage of patients exhibited a pure-form subtype, 36% more than one subtype, and 25% could not be classified as any of the subtype groups. Symptom reduction and likelihood of remission did not differ significantly between subtype groups, and the authors of the study concluded that subtypes of depression may be of minimal value in antidepressant selection. (Arnow et al, 2015)

Monoamine Oxidase (MAO) Inhibitors

Drug therapy with monoamine oxidase (MAO) inhibitors has been considered to be an effective method for treating patients with atypical depression, while MAO inhibitors are due to their potential side effects no longer considered first choice in the treatment of depression. The selective serotonin reuptake inhibitors (SSRIs), which are usually tolerated well, are therefore often used instead (Nierenberg, Alpert, Pava, Rosenbaum, & Fava, 1998). However, their effectiveness in patients suffering from atypical depression seems to ber limited (Singh & Williams, 2006).

Selective Serotonin Reuptake Inhibitors (SSRIs)

Lonnqvist et al (1994) showed a better effect of the reversible MAO inhibitor moclobemide than the first-generation SSRI fluoxetine. Another study found no difference between moclobemide and the second-generation SSRI sertraline. (Søgaard et al, 1999). A comparison of moclobemide and a tricyclic antidepressant, clomipramine, within a project of the DUAG (Danish University Antidepressant Group) Study, showed a better effect of moclobemide than clomipramine in patients with atypical vegetative symptoms, while the reverse was true for patients suffering from typical depression. (Bech et al, 2012).

Bupropion

Comparing with SSRI, Papakostas et al (2005) showed good efficacy of bupropion in improving hypersomnia and fatigue in depressed patients. Another study found that depressed patients with atypical features are less likely to remit with citalopram than those without atypical features. (Stewart, 2010) In the GENDEP study, there was no indication that AD may respond better to SSRI than to tricyclic antidepressants as a similar efficacy of escitalopram and nortriptyline was observed. (Uher et al, 2011) Pae et al (2014) in a post hoc analysis of five short-term trials with selegiline (selective MAOI type B) showed equal efficacy of this drug in patients with atypical and non-atypical subtype of depression.

III. PSYCHOTHERAPY

Psychotherapy is over the long-term the most important pillar in the therapy of most forms of depression, except maybe for the most severe ones. This also applies to atypical depression. As in other forms of depression, but maybe even more so, motivation and an insight into the benefits of therapy has to be established early on. Since communication-focused therapy (CFT), as developed by the author, works with the basic parameters of needs, values and aspirations more directly than some other forms of therapy, which can help to maintain a

greater motivation for and, as a result, a better understanding of the therapeutic process.

Cognitive Behavioral Therapy (CBT)

The efficacy of CBT in AD was demonstrated in a pilot study (Mercier et al, 1992) as well as in subsequent trials. (Jarrett et al, 1999; Jarrett et al, 2000; Henkel et al, 2010). In one study, CBT treatment was found to be equal to the treatment with the MAO inhibitor phenelzine. (Jarrett et al, 1999)

Cuijpers et al (2017) performed a meta-analysis comparing AD and melancholic depression as a predictor of the therapeutic outcome of CBT and did not find any indication that either of these types can be a significant outcome moderator. Fournier et al (2013) point to a different change in specific depressive symptoms during a 16-week antidepressant (paroxetine) or CBT course of treatment. In their study, both treatments reduced cognitive and suicide symptoms; however, cognitive therapy reduced the atypical-vegetative symptoms more than medications, which suggests its usefulness in AD.

Psychodynamic Psychotherapy

There is a report about the comparison of the therapeutic effects on the depressions, not specifying atypical depression, between psychoanalysis and cognitive behavioral therapy (Huber, Zimmermann, Henrich, & Klug, 2012). The results indicate that both the psychoanalysis and the cognitive behavioral therapy produce the respective effects, but the effect of the psychoanalysis is found to last longer. It is speculated that the reason for this is that the psychoanalysis could bring some changes to the patients' personality structure (Huber et al., 2012; Fonagy et al., 2015).

Given the symptoms of a decrease in initiative and motivation for important tasks and hypersomnia one may also think of the working of defense mechanisms. In psychodynamic theory, primitive mechanisms are used to promptly find relief from conflicts or stresses by expulsion of the conflicts or stresses (Klein, 1946). However, since they are maladaptive, they lead to less stability in the interaction with oneself and with the world around. While the lower ones are observed in the severe psychotic state (Vaillant, 1986), the higher ones may play a role in interpersonally and intrapersonally better functioning patients.

In psychoanalysis, great importance has been placed on assessment of the patients' ego functions (Bellak, Hurvich, & Gediman, 1973). The ego functions mean psychological functions to support individual adaptation, including the capacity of evolving the interpersonal relationships (objective relation), the defensive functioning to adjust individual adaptation against conflicts and stresses, the function of testing reality that provides the basis for perceiving the external events and understanding those events correctly, and the like.

Kernberg (1976) proposed the organization of character pathology. The organization of character pathology is a concept related to ego functions because the character pathology is classified based on the object relations, defensive functioning, development of superego and the like. It is assumed that patients with melancholic depression are in the higher (depressive-masochistic) level of organization of character pathology. However, there is no explicit suggestion about the organization of character pathology of the patients with atypical depression, and they have been assumed to be in the lower level because the patients with atypical depression and those with borderline personality disorder are alike in the clinical pictures and attitudes (Perugi & Akiskal, 2002; Kaiya, 2008).

However, ego functions could be seen as just one way how to describe a kind of communication dynamics. It would thus be unlikely that any investigation into ego strength could be informative because it does not look at the communication patterns the patient uses to interact witho him or herself and the world around.

Self-Psychology

Another explanation for some of the symptoms observed in atypical depression, and particularly their fluctuating dynamics, might be the dynamics of narcissism. Factors that have been mentioned include excessive admiration by parents, lack of realistic feedback from parents during development, unreliable parental caregiving, and/or emotional abuse during childhood. By failing to provide appropriate empathic feedback during critical times in a child's development, the child does not develop the ability to regulate self-esteem, and so the adult vacillates between an irrational overestimation of the self and feelings of inferiority. This could contribute to some of the instability observed in atypical depression.

Self-psychology, like object-relations theory, emerged out of an effort to treat patients who were not responding to ego psychology therapies constructed around the analysis of psychological defenses. Selfobjects are external objects that function as part of the "self-machinery" - 'i.e., objects which are not experienced as separate and independent from the self'. (Kohut, 1971) They are persons, objects or activities that "complete" the self, and which are necessary for normal functioning. 'Kohut describes early interactions between the infant and his caretakers as involving the infant's "self" and the infant's "selfobjects". (Brinich, 2002) Observing the patient's selfobject connections is a fundamental part of self-psychology. For instance, a person's particular habits, choice of education and work, taste in life partners, may fill a selfobject-function for that particular individual. When a relationship is established with a new selfobject, the relationship connection can "lock in place" quite powerfully, and the pull of the connection may affect both self and selfobject. Powerful transference, for instance, is an example of this phenomenon.

Selfobjects 'cover the phenomena which were described by Winnicott as transitional objects. Among 'the great variety of selfobject relations that support the cohesion, vigor, and harmony of the adult self ... [are] cultural selfobjects (the writers, artists, and political leaders of the group – the nation, for example – to which a person feels he belongs)'. (Kohut, 1971)

From a self-psychology perspective, Heinz Kohut proposed that in order to understand the narcissistic patient, the therapist must assume an empathic-introspective observational stance. By doing so, the therapist can understand the complex, inner world of the patient and the patient's inner subjective experience. The patient can then communicate freely, and the analyst becomes privy to what is being repressed or warded off by the patient. Thus, one may speculate that the constructs used in self-psychology can be viewed as tools to facilitate access to and work with internal and external communication patterns within a larger theoretical framework.

IV. COMMUNICATION-FOCUSED THERAPY (CFT)

Depression causes many of its symptoms through reduction in the exchange of meaningful information, either inside the patient or on an interpersonal level. (Haverkampf, 2010b, 2013, 2017d) To treat the depression mean increasing the level of information exchange through an improvement in internal and external communication patterns. (Haverkampf, 2010a)

The experienced flows of meaningful messages give rise to a sense of self, and the perceived efficacy in influencing, redirecting and changing these information flows leads to several positive perceptions, or feelings, such as a more positive self-image and improvements in mood. More awareness of and insight into internal and external communication patterns can thus lead to more affective and emotional stability, which is particularly helpful in atypical depression.

Stabilization

Relationships are more or less stable and habitual communication structures in the world that hold an expectation for a mutual benefit. They require to some degree efficiently working communication patterns. The DSM-5 (American Psychiatric Association, 2013) include "interpersonal rejection sensitivity," i.e., an excessively intense or sensitive reaction to messages from others. Work on more effective communication patterns, that help an individual satisfy needs, values and aspirations, can improve relationships, which then also has a stabilizing effect on the experienced connectedness with oneself and the world, mood, emotions and the overall quality of life. A better connectedness leads to more emotional and affective stability because more meaningful information can be accessed.

Vulnerability

According to Klein, Gittelman, Quitkin, & Rifkin (1980), the core impairment of atypical depression is considered to be the vulnerability of emotion regulation, while the dependence on others and the sensitivity to stimuli are considered secondary vulnerabilities. From a communication perspective it is about how information is transferred, filtered and selected. Better communication patterns reduce the vulnerabilities and increase the sense and experience of stability in atypical depression, as they do in other conditions. (Haverkampf, 2017c, 2017d, 2017e, 2017b, 2017a, 2018)

V. OTHER THERAPY APPROACHES

Since symptoms like overeating and oversleeping, as well as "lethargy" (fatigue), are characteristic of SAD, an attempt was made to use light therapy for AD, but the results were negative. (Stewart et al, 1990) More promising outcomes were obtained with exercise where hypersomnia and increased BMI had been associated with better response. Rethorst et al (2016) studied this procedure in depressed patients, and the results showed that patients with AD had better treatment response to exercise.

Hypersomnia and elevations in BMI seem to be associated with better treatment outcomes to exercise (Rethorst et al., 2013; Toups et al., 2011). Thus, the treatment response to exercise may vary based on depressive subtypes (Schuch and de Almeida Fleck, 2013).

VI. CONCLUSION

Psychotherapy is the central pillar in the treatment of atypical depression. Medication can be supportive, but it is mostly the communication between patient and therapist which brings about the needed change, and thereby leads to a reduction in symptoms. An empathic approach which is directed at helping the patient understand and change the own internal and external communication patterns used in interactions with oneself and others is fundamental in bringing about more permanent improvements.

DECLARATION OF INTERESTS

The author reports no competing interest.

This article is **solely a basis for academic discussion** and no medical advice can be given in this article, nor should anything herein be construed as advice. Information may be incorrect or outdated. Trademarks belong to their respective owners. No checks have been made.

REFERENCES

- American Psychiatric Association (2013). Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition. Arlington, MA: American Psychiatric Publication. https://doi.org/10.1176/appi.books.9780890425596
- Angst J, Adolfsson R, Benazzi F, et al. The HCL-32: towards a self-assessment tool for hypomanic symptoms in outpatients. J Affect Disord. 2005;88(2):217–233.
- Arnow BA, Blasey C, Williams LM, et al. Depression subtypes in predicting antidepressant response: a report from the iSPOT-D trial. Am J Psychiatry. 2015;172(8):743–750.
- Bech P, Stage KB, Larsen JK, Vestergaard P, Gram LF, DUAG The predictive validity of atypical neurovegetative depressive symptoms identified by the first principal component in the DUAG trial of moclobemide versus clomipramine. J Affect Disord. 2012;140(3):253–259
- Bellak, L. Hurvich, M., & Gediman, H. (1973). Ego Function in Schizophrenics, Neurotics, Normals. New York: Wiley.
- Brinich, P., & Shelley, C. (2002). The self and personality structure. McGraw-Hill Education (UK).
- Buzuk G, Łojko D, Owecki M, Ruchała M, Rybakowski J. Depression with atypical features in various kinds of affective disorders. Psychiatr Pol. 2016;50(4):827–838.
- Cuijpers P, Weitz E, Lamers F, et al. Melancholic and atypical depression as predictor and moderator of outcome in cognitive behavior therapy and pharmacotherapy for adult depression. Depress Anxiety. 2017;34(3):246–256. [PubMed]
- Davidson JR, Miller RD, Turnbull CD, Sullivan JL. Atypical depression. Arch Gen Psychiatry. 1982;39(5):527–534.
- Denda, K. (2009). "Depression" among the Youth: What is "New Type Depression"? Tokyo: Chikumashobo. (In Japanese, translated by the author of this article)
- Fonagy, P., Rost, F., Carlyle, J. A., McPherson, S., Thomas, R., Fearon, R. M. P., Goldberg, D., & Taylor, D. (2015). Pragmatic Randomized Controlled Trial of Long-Term Psychoanalytic Psychotherapy for Treatment-Resistant Depression: The Tavistock Adult Depression Study (TADS). World Psychiatry, 14, 312-321. https://doi.org/10.1002/wps.20267
- Fournier JC, DeRubeis RJ, Hollon SD, Gallop R, Shelton RC, Amsterdam JD. Differential change in specific depressive symptoms during antidepressant medication or cognitive therapy. Behav Res Ther. 2013;51(7):392–398. [PMC free article] [PubMed]
- Haverkampf, C. J. (2010a). *Communication and Therapy* (3rd ed.). Dublin: Psychiatry Psychotherapy Communication Publishing Ltd.

- Haverkampf, C. J. (2010b). *Depression Mania and Communication* (3rd ed.). Dublin: Psychiatry Psychotherapy Communication Publishing Ltd.
- Haverkampf, C. J. (2013). A Case of Depression. *J Psychiatry Psychotherapy Communication*, 2(3), 88–90.
- Haverkampf, C. J. (2017a). *Communication-Focused Therapy* (*CFT*) (2nd ed.). Dublin: Psychiatry Psychotherapy Communication Publishing Ltd.
- Haverkampf, C. J. (2017b). Communication-Focused Therapy (CFT) for Anxiety and Panic Attacks. *J Psychiatry Psychotherapy Communication*, 6(4), 91–95.
- Haverkampf, C. J. (2017c). Communication-Focused Therapy (CFT) for Bipolar Disorder. *J Psychiatry Psychotherapy Communication*, 6(4), 125–129.
- Haverkampf, C. J. (2017d). Communication-Focused Therapy (CFT) for Depression. *J Psychiatry Psychotherapy Communication*, 6(4), 101–104.
- Haverkampf, C. J. (2017e). Communication-Focused Therapy (CFT) for OCD. *J Psychiatry Psychotherapy Communication*, 6(4), 102–106.
- Haverkampf, C. J. (2018). *Communication-Focused Therapy* (CFT) Specific Diagnoses (Vol II) (2nd ed.). Dublin: Psychiatry Psychotherapy Communication Publishing Ltd.
- Henkel V, Mergl R, Allgaier AK, et al. Treatment of atypical depression: post-hoc analysis of a randomized controlled study testing the efficacy of sertraline and cognitive behavioural therapy in mildly depressed outpatients. Eur Psychiatry. 2010;25(8):491–498. [PubMed]
- Huber, D., Zimmermann, J., Henrich, G., & Klug, G. (2012).
 Comparison of Cognitive-Behavior Therapy with
 Psychoanalytic and Psychodynamic Therapy for
 Depressed Patients: A Three-Year Follow-Up Study.
 Zeitschriftfur Psychosomatische Medizin und
 Psychotherapie, 58, 299-316.
- Hayashi, H., Takei, Y. Fujimori, A., Takeuchi, I., & Hono, T.
 (in press). Characteristics of Parent-Child Relationship,
 Defense Mechanism and Ego Function of Atypical
 Depression: Through Analysis Using
 SemistructuredInterviews with Psychiatrists and Clinical
 Psychologists. Kawasaki Medical Welfare Journal. (In
 Japanese with English abstract)
- Hirschfeld RM, Williams JB, Spitzer RL, et al. Development and validation of a screening instrument for bipolar spectrum disorder: the Mood Disorder Questionnaire. Am J Psychiatry. 2000;157(11):1873–1875.
- Husain MM, McClintock SM, Rush AJ, et al. The efficacy of acute electroconvulsive therapy in atypical depression. J Clin Psychiatry. 2008;69(3):406–411.
- Izawa, K. (1999). Persistent Effects of Traumatic Experiences on Borderline Personality Trait. Japanese Journal of Personality, 7, 88-98. (In Japanese with English abstract) https://doi.org/10.2132/jjpjspp.7.2_88

- Jarrett RB, Schaffer M, McIntire D, Witt-Browder A, Kraft D, Risser RC. Treatment of atypical depression with cognitive therapy or phenelzine: a double-blind, placebo-controlled trial. Arch Gen Psychiatry. 1999;56(5):431–437. [PMC free article] [PubMed]
- Jarrett RB, Kraft D, Schaffer M, et al. Reducing relapse in depressed outpatients with atypical features: a pilot study. Psychother Psychosom. 2000;69(5):232–239. [PubMed]
- Kernberg, O. (1976). Object Relations Theory and Clinical Psychoanalysis. Maryland: Jason Aronson.
- Klein, D. F., Gittelman, R., Quitkin, F., & Rifkin, A. (1980). Diagnosis and Drug Treatment of Psychiatric Disorders: Adults and Children (2nd ed.). Baltimore: Williams and Wilkins.
- Klein, M. (1946). Notes on Some Schizoid Mechanisms. International Journal of Psycho-Analysis, 27, 99-110.
- H. Kohut (1971), The Analysis of the Self. New York: International Universities.
- Korte SM, Prins J, Krajnc AM, et al. The many different faces of major depression: it is time for personalized medicine. Eur J Pharmacol. 2015;753:88–104.
- Lonnqvist J, Sihvo S, Syvälahti E, Kiviruusu O. Moclobemide and fluoxetine in atypical depression: a double-blind trial. J Affect Disord. 1994;32(3):169–177.
- Mercier MA, Stewart JW, Quitkin FM. A pilot sequential study of cognitive therapy and pharmacotherapy of atypical depression. J Clin Psychiatry. 1992;53(5):166–170.
- Milaneschi Y, Lamers F, Bot M, Drent ML, Penninx BW. Leptin dysregulation is specifically associated with major depression with atypical features: evidence for a mechanism connecting obesity and depression. Biol Psychiatry. 2017;81(9):807–814.
- Millon, T. (1987). Manual for the MCMI-II (2nd ed.). Minneapolis: National Computer Systems.
- Murray CJ, Lopez AD. Global mortality, disability, and the contribution of risk factors: Global Burden of Disease Study. Lancet. 1997;349(9063):1436–1442.
- Nakanishi, N., & Sakata, T. (1989). Development of Ego Functions in Adulthood Ego-Oriented Counseling for Adults: A Study Based on the Result of Ego Functions Inventory (EFI) of Adults. Japanese Journal of Counseling Science, 21, 129-138.
- Nierenberg, A. A., Alpert, J. E., Pava, J., Rosenbaum, J. F., & Fava, M. (1998). Course and Treatment of Atypical Depression. Journal of Clinical Psychiatry, 59, 5-9.
- Perugi, G., & Akiskal, H. S. (2002). The Soft Bipolar
 Spectrum Redefined: Focus on the Cyclothymic,
 Anxious-Sensitive, Impulse-Dyscontrol, and Binge-Eating Connection in Bipolar II and Related Conditions.
 Psychiatric Clinics of North America, 25, 713-737.

- https://doi.org/10.1016/S0193-953X(02)00023-0
- Pae CU, Patkar AA, Jang S, Portland KB, Jung S, Nelson JC. Efficacy and safety of selegiline transdermal system (STS) for the atypical subtype of major depressive disorder: pooled analysis of 5 short-term, placebocontrolled trials. CNS Spectr. 2014;19(4):324–329. [PubMed]
- Papakostas GI, Nutt DJ, Hallett LA, Tucker VL, Krishen A, Fava M. Resolution of sleepiness and fatigue in major depressive disorder: a comparison of bupropion and the selective serotonin reuptake inhibitors. Biol Psychiatry. 2006;60(12):1350–1355. [PubMed]
- Perugi, G., Akiskal, H. S., Lattanzi, L., Cecconi, D., Mastrocinque, C., Patronelli, A., Vignoli, S., & Bemi, E. (1998). The High Prevalence of "Soft" Bipolar (II) Features in Atypical Depression. Comprehensive Psychiatry, 39, 63-71. https://doi.org/10.1016/S0010-440X(98)90080-3
- Rethorst CD, Tu J, Carmody TJ, Greer TL, Trivedi MH.
 Atypical depressive symptoms as a predictor of treatment response to exercise in Major Depressive Disorder. J Affect Disord. 2016;200:156–158. [PMC free article] [PubMed]
- Rodgers, S., Vandeleur, C. L., Ajdacic-Gross, V.,
 Aleksandrowicz, A. A., Strippoli, M. F., Castelao, E.,
 Glaus, J., Lasserre, A. M., Müller, M., Rossler, W.,
 Angst, J., & Preisi, M. (2016). Tracing the Associations between Sex, the Atypical and the Combined Atypical-Melancholic Depression Subtypes: A Path Analysis.
 Journal of Affective Disorders, 190, 807-818.
 https://doi.org/10.1016/j.jad.2015.10.067
- Sargant, W. (1962). The Treatment of Anxiety States and Atypical Depression by the Monoamine Oxidase Inhibitor Drugs. Journal of Neuropsychiatry, 3, 96-103.
- Singh, T., & Williams, K. (2006). Atypical Depression. Psychiatry, 3, 33-39.
- Søgaard J, Lane R, Latimer P, et al. A 12-week study comparing moclobemide and sertraline in the treatment of outpatients with atypical depression. J Psychopharmacol. 1999;13(4):406–414
- Stewart JW, Quitkin FM, Terman M, Terman JS. Is seasonal affective disorder a variant of atypical depression? Differential response to light therapy. Psychiatry Res. 1990;33(2):121–128.
- Stewart JW, Garfinkel R, Nunes EV, Donovan S, Klein DF. Atypical features and treatment response in the National Institute of Mental Health Treatment of Depression Collaborative Research Program. J Clin Psychopharmacol. 1998;18(6):429–434
- Stewart JW, McGrath PJ, Quitkin FM, Klein DF. DSM-IV depression with atypical features: is it valid? Neuropsychopharmacology. 2009;34(13):2625–2632. [PubMed]

- Stewart JW, McGrath PJ, Fava M, et al. Do atypical features affect outcome in depressed outpatients treated with citalopram? Int J Neuropsychopharmacol. 2010;13(1):15–30. [PubMed]
- Takehata, Y., & Sase, R. (2015). Maladjustment of University Students: Assessment of Maladjustment and Over-Adaptation. OIU Journal of International Studies, 28, 65-71.
- Uher R, Dernovsek MZ, Mors O, et al. Melancholic, atypical and anxious depression subtypes and outcome of treatment with escitalopram and nortriptyline. J Affect Disord. 2011;132(1–2):112–120. [PubMed]
- Vaillant, G. E. (1986). Vaillant's Glossary of Defenses. InVaillant, G. E. (Ed.), Empirical Studies of EgoMechanisms of Defense (pp. 111-120). Washington DC:American Psychiatric Press.
- West, E. D., & Dally, P. J. (1959). Effect of Iproniazid in Depression Syndromes. British Medical Journal, 1, 1491-1494. https://doi.org/10.1136/bmj.1.5136.1491