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Pain, Affect, and Attachment*

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Review Article

Abstract

Various psychodynamic processes may underlie the development of psychogenic pain disorder such as conversion, the displacement of affect, or narcissistic defenses. However, many of the processes suggested are related to a disorder of affect regulation. The term affect regulation in psychoanalytic literature refers to phenomena which are often described by the concept of alexithymia. Empirical observations suggest that alexithymia is correlated to insecure attachment, especially an insecure dismissing representation of attachment. Psychodynamic psychotherapy in psychogenic pain disorder should focus on the reintegration of split-off affects which may provoke intensive counter-transference and which in order to be used therapeutically must be linked to attachment experiences within and outside of the therapeutic relationship.

Keywords: Psychogenic pain disorder, Affect regulation, Alexithymia, Insecure attachment

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The pain prone personality and the psychodynamic taxonomy of pain development

G. L. Engel`s contribution to the concept of the "pain prone personality" (1959) implied "something like a dam break" (Hoffmann, 2003) for the psychoanalytic understanding of the development of chronic pain. In his description of the concept, Engel characterized the biographical conditions and their characterological processing underlying the development of chronic pain; feelings of guilt, where the pain receives the function of an atonement, inhibition of aggressive needs, as well as biographical experiences of suffering and failures, which lead to a masochistic character development. For the first time, with this description, Engel drew attention to the importance of pain experience as a "comprehensive mental regulation system" (Hoffmann, 2003). In spite of enriching the clinical understanding and providing valuable impetus for pain research, as is the case with other psychosomatic symptoms, the assumption of a specific form of personality pathology with psychogenic pain could not be confirmed by empirical research. The reason was not so much that the typology developed by Engel was clinically invalid, but it applied only to a subgroup of patients and described only a part of pathogenetic relevant mental processes.

Therefore, the contributions from Hoffmann

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(2003) and Hoffmann and Egle (1989) are of importance for a taxonomy of pathogenetic processes which underlie the development of chronic pain because they contrasted the descriptive standardization, as occurred under the concept of somatoform pain disorder in ICD and DSM from the early 80s onwards, with a more differentiated description of the clinical spectrum of pain disorders. These thoughts also carry consequences for the psychotherapeutic treatment.

Five principles have been distinguished for the development of psychogenic or predominantly psychogenic pain (Hoffmann, 2003; Hoffmann & Egle, 1989). These are:

1. The principle of mental substitution (narcissistic mechanism of pain development)
2. The principle of conflict relief through body language expressed symbolization (conversion mechanism of pain development)
3. The principle of primary (not based on conversion) transformation of affects into physical stress states
4. The principle of learning processes
5. The attachment concept

For our context, the first three principles are of particular interest. Learning processes play a central role in pain; however, in our view, they relate more to pain chronification than to pain development. According to Hoffmann (2003), attachment security and attachment insecurity determine different forms of illness behavior and interaction in the medical supply system, but engage less in the development of pain itself. In relation to this point, we will present a different view further below. In the following, we want to outline the first three of the abovementioned principles.

In mental substitution, the narcissistic mechanism, the pain takes on a central function for self-regulation. Unbearable and less differentiated stress conditions resulting partly from a chronic discrepancy between the ideal and real ego are tied up in pain. Pain provides protection against a breakdown of the mental order and, in this sense, takes on a "psychoprosthetic or substitution function".

In contrast, the pain in the conversion serves as the relief of a paraphrased conflict finding expression in a body language, and hence, meaningful symptom. Here, too, the relief of a "painful affect" plays a central role alongside defense mechanisms (repression, displacement, consciousness changing and dissociation, identification, and etcetera) involved in the conversion. The conflict content is strongly related to the suppression of aggressive impulses at the level of a triadic (oedipal) development stage. The conversion symptom is simultaneously expression and the last part of a highly structured defense process, not a prosthesis for narcissistic regulation.

The principle of the transformation of affects in physical stress states describes a mechanism of pain development, which has an impact on many musculoskeletal pain syndromes (back pain, tense headache). Due to somatic affect equivalents, Freud (1971) ascribed the symptom formation to actual neuroses and contrasted them with psychoneuroses. Here, the physical symptom equally presents a somatic equivalent in place of the affect, which is not, or no longer, represented in the mental experience. The concept of affect equivalent is related to Alexander's theory of deployment reactions. They are dysfunctionally activated because of an unconscious and unrealized impulse and conflict in the activity part, which leads to a physiological allocation reaction.

Hoffmann and Egle's considerations raise the question of "Upon which structural level the described mechanisms of symptom formation are located?" This aspect is important for psychotherapeutic treatment and deserves a thorough examination.

Conversion is commonly regarded as a form of symptom formation at a rather high structural level. With its genetic roots in a developmental stage in which differentiated defense mechanisms are available and a stable

distinction between self and object representations is established, conversion arises from a mental conflict. On the other hand, the psychoprosthetic function of pain presents a symptom formation at a rather low-level structure. For these pain syndromes, the boundaries between self and object representations are often not clearly differentiated. There are relationship constellations in which the object has a distinct regulatory function for the self (value) experience. Self-images and internal object images are rarely differentiated. The same is true for object perception. Having classified the different types of symptom formation of psychogenic disorders on a scale of four structures, Rudolf (1992) provided a description of this group overlapping with the concept of depressive somatization. The concept follows the observation that a depressive basic conflict often plays a central role in the development of this disorder (Rudolf, 1998).

Finally, the mechanism of affect equivalent can be classified as between the two aforementioned mechanisms of the structural development. It corresponds to the mode that Rudolf refers to as a psychovegetative group. Self-image and object images are stably differentiated, but there are deficits in the representation of affects. These deficits do not only affect individual affects, but also affect groups. This leads to a global disorder of the affect perception described in the literature as the concept of alexithymia.

The operationalized psychodynamic diagnostics (OPD) provides the opportunity to deepen and to specify the structural diagnostics in the field of psychogenic and psychosomatic pain syndromes. Needless to say, there is still a great need for further research in order to validate the mainly overlapping clinical concepts and descriptions, to relate them to common characteristics of the structural development, and thereby, to develop a system which can come to serve as guideline for psychotherapeutic treatment.

Pain and affect

The study of affects has a long tradition in psychoanalytic theory. It begins with Freud's theory of conversion (a conflictual idea is repressed into the unconscious while the energy inherent in the affect "converts" into the somatic). In the various versions of the theory of anxiety, Freud has also dealt with the genesis and function of affects in detail (Freud, 1971). Finally, the psychoanalytic defense theory describes specific mechanisms of affect defense and affect processing. The lack of an affect theory in today's psychoanalysis, therefore, has its limits.

In recent years, the concept of affect regulation has increasingly gained importance in the clinical literature. The reason lies not so much in the fact that it is related to an especially precisely defined or easy to operationalize construct, but the opposite. The appeal of the concept originates rather from the accentuation of the particular significance of affect processing in the development of a multitude of mental disorders, and from the concept itself facilitating the communication between psychotherapists, developmental psychologists, cognitive psychologists, and affect researchers. Affect regulation represents therefore something like a bridge concept between different research fields.

Problems of affect regulation also play a central role in pain patients. They often have difficulty in perceiving affects such as anger and grief which are replaced by pain in the dedifferentiation of the affective experience. This corresponds to the forms of somatization presented above. In the following, we want to share a number of considerations from the perspective of recent affect research on pathogenetic mechanisms of pain development. They will help us to understand and differentiate these concepts better.

Presently, the affect system is regarded as a dynamic modular system (Figure 1). It allows us to ask who, in which situation and based on which disposition, develops which profile of

affective modules (Krause, Merten, Schwab & Steimer-Krause, 1998).

A widespread view within the psychosomatic literature on the somatization theory of affects is the assumption that there exists a proportionally reverted or inverse relationship between the expression of an affect and its related physiological activation (i.e., the components 4-6 and 1-3 of the presented scheme). According to this view, a physiological activation is particularly caused when the affect perception and expression is suppressed. Contrary to this hypothesis of an inverse relation between affect expression and physiological activation, the findings of affect research illustrate that the various modules of an affect need not necessarily be coupled with each other under normal conditions. They rather act relatively independent of each other. The view of the suppression of an affect's component automatically leading to a reinforcement of the "activity" of the remaining modules is not supported by the current research results (Krause 2004). Yet the differential connections between the various modules of the affect allow a clearer delimiting of the above presented mechanisms of pain development from each other.

1. In the conversion, an unconscious (repressed) situational perception in the sense of an affect (anger or rage) is shifted to the arbitrary motoric system and is represented here symbolically encoded (4 to 1).

2. In the affect equivalent, the affect (anger or rage) is presented relatively uncoded in the motoric expressive system without the representation of the associated situational perception, body perception, and affect semantics in the consciousness (of 4 and 5, and 6 to 3). If this process takes place in the vegetative area, we can speak of affect equivalents. If it takes place in the musculoskeletal area, the differentiation of the conversion can be difficult.

3. Finally, an affect can be inhibited in all modules in its development by the mobilization of another affect. Krause (2004) defines this as affect replacement and compares it with the phenomenon of the masked affect expression. A subtype of affective replacement is the affect reversal in which the affect becomes replaced by its opposite (crying by laughter). This process could correlate with the prosthetic function of pain presented in the taxonomy above, in which pain appears as affect replacement instead of differentiated emotions.

The reformulation of psychodynamic mechanisms of pain development in the concepts of emotion research presents the symptom formation in a more interpersonal context. Affects are paradigmatic forms of object-relations regulation with high survival value (Krause, 1998).

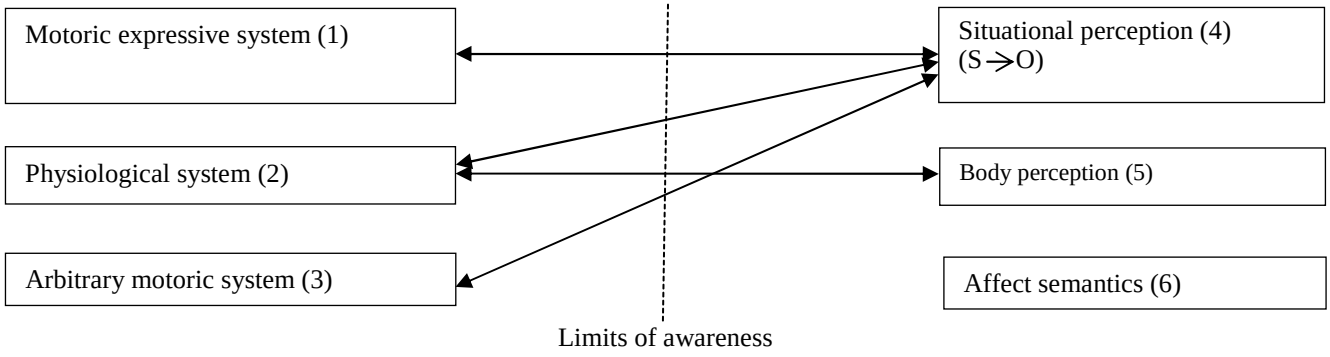

Figure 1. Interconnection of affective modules in an individual (modified based on Krause, 2004)

They have, respectively, a special propositional structure with a self, an object, and a desired interaction between the two (Krause, 1998). Affects serve essentially the social regulation and social exchange. This is why affective expression behavior in pain patients takes on a centrally important behavioral dimension (Bernardy, 2004). We will discuss the relationship between affect development and attachment in further detail below. In the following, we first want to look at the clinical concept of affect regulation-disorder and examine its application to somatoform pain.

For a description of affect pathology, Nemiah and Sifneos (1970) shaped the concept of alexithymia which according to their view is characteristic for psychosomatic patients (Nemiah & Sifneos, 1970). They first understood alexithymia as the inability to communicate and express feelings. A shift in meaning towards inner (interoceptive) problems of experience and the differentiation of emotions (perceptual-cognitive level) took place in later publications. Lacking the mentalization of affects, mainly physical perceptions, diffuse stress states, or undifferentiated feelings replace complex and identifiable emotions in the experience and expression of alexithymia patients. The deficits refer to all affects and are not valence specific; this means, they are not concerned with purely positive or negative affects (Nemiah & Sifneos, 1970; Sifneos, 1987). In a very instructive review on the alexithymia concept, Laireiter (1989) defines the affected aspects of emotional experience as follows:

1. Deficits in the sensory experience core of emotions: The senso-motoric activation along with the emotions cannot be perceived or only undifferentiated.
2. Deficits of cognitive elements surrounding the sensory-emotional experience core: Alexithymia subjects have no or insufficient access to cognitive aspects of emotion schemes such as meaning, thoughts, ideas and imagination (Taylor, Bagby, & Parker., 1997).
3. Deficits in emotional attribution of the perceived physiological change: The physiological feedback cannot be emotionally integrated and instead becomes somatically attributed.
4. Inability to differentiate emotions

Laireiter`s (1989) presentation of the alexithymia concept creates a streamlining and an order of the theory. Like Krause, he bases his concept on a modular theory of affect and defines disorders in the relation of different subcomponents of the affect.

Thus, how do the findings on alexithymia correspond to patients with somatoform pain syndromes? We want to present some findings stemming from empirical research.

According to a review by De Gucht and Heiser (2003), available studies on the connection between alexithymia and the degree of functional physical complaints of different patient groups demonstrate a weak to moderate positive correlation between the total value of the 20-item Toronto Alexithymia Scale (TAS-20) and somatoform complaints indexes. The connection is especially evident for a subscale of the TAS-20 that measures difficulties in the identification of affects (TAS-20, Factor 1). Looking specifically at the studies in which patients with pain disorders were compared to different control groups, the result can be summarized as follows: When comparing pain patients with non-clinical control persons, pain patients prove to be more alexithymic than controls (Brosschot and Aarsee, 2001; Sriram, Chaturvedi, Gopinath, & Shanmugam, 1987). The same is true when comparing pain patients with probands who are overweight or suffer from nicotine dependence (Lumley, Asselin, & Norman, 1997). However, if chronic pain patients are compared with psychiatric patients, higher values arise for the latter than for pain patients (Kosturek, Gregory, Sousou, & Trief, 1998). This latter finding raises doubts about how specific findings on alexithymia in patients with somatoform pain disorders actually are.

Methodological questions about the validity of the presented results concern primarily the measurability of alexithymia with a questionnaire for self-assessment. Only one single previous study applied a further investigative approach from the TAS-20 that is not based on self-assessment. Subic-Wrana Bruder, Thomas, Gaus, Merkle, Kohle, et al. (2002) applied the Levels of the Emotional Awareness Scale in addition to the TAS-20 (Lane, Quinlan, Schwartz, Walker, & Zeitlin, 1990). This study method allowed the distinguishing of patients with somatoform disorders from psychiatric patients, namely by lower values of Levels of Emotional Awareness Scales levels of emotional awareness scales (LEAS) indicating a pronounced alexithymia in somatoform patients compared to the clinical comparison group.

Alexithymia can be understood as a form of affect regulation disorder. On the other hand, the concept of affect regulation goes beyond the alexithymia concept. For the theorists considering the development of the ability of affect regulation as the result of a relational process in which, especially, the primary attachment relationships play an important role, the question of affect regulation is more fundamental. It is concerned with the manner in which infants advance from a state of co-regulation to self-regulation (Fonagy, Gyorgy, Jurist, & Target, 2002). We, therefore, want to discuss some theories and findings that shed light on the relationship between attachment development and affect regulation.

Affect and attachment

The focus of attachment research on questions of affect theory and affect regulation is relatively recent. Fonagy et al. (2002) even assumes that Bowlby himself has not fully recognized the affect regulation as product of the attachment development. However, there has been a noticeable turn in this respect in recent attachment research (Magai, 1999; Sroufe, 1997). It has increasingly focused on the understanding of how the function of affect regulation (as a special case of self-regulation) develops in the interaction and from the initial co-regulation through the primary attachment figure.

In a number of experimental animal studies carried out in the eighties, Hofer (1984, 1987) proved the high specificity of external psychobiological regulatory function in the early development stages.

Hofer (1987) showed that the separation of mammals from their mothers results in complex physiological reactions that apply to the heart rate, body temperature, plasma cortisol, and sleep patterns. Depending on the maturation state of the organism and the available behavioral strategies, reversible or permanent physiological changes are caused by the separation. Particularly relevant to the description of the specificity of the external psychobiological regulatory functions of the mother was the discovery that the acute distress reaction after separation can be stopped under certain conditions, for example by a surrogate mother. Hofer (1987) investigated which sensorimotoric characteristics of the mother and maternal behavior can, respectively, influence specific behavioral and physiological processes triggered by separation. This led to the discovery that tactile, olfactory, and behavioral characteristics of the mother (heat, milk, smell, and etcetera), respectively, caused different physiological reactions upon withdrawal. Hofer, 1984 described the specific stimuli becoming effective in the mother-child interaction as psychobiological regulators. They exert a direct influence on the maintenance of physiological homeostasis in the offspring. Hofer (1987) formulated the hypothesis that there is an increasing internalization of psychobiological regulation functions in species with more complex cortical functions in later development stages, However, this process is closely connected with the acquisition of symbolic functions. Since the internalization is never quite complete, the physiological homeostasis remains, in older age, an open system against external influences (Hofer, 1984; Pipp &

Harmon, 1987).

Some observations of attachment research suggest similar conclusions for the human sector. Spangler & Schieche (1995) found higher cortisol increases during the time of free play in children (aged between 3 to 6 months) of non-sensitive mothers than in children with sensitive mothers (for the construct of sensitivity and its operationalization see Ainsworth, Blehar, Waters, & Wall, 1978; Belsky, 1984; Egeland and Farber, 1984; Grossmann and Grossmann, 2003). Nevertheless, this correlation was no longer verifiable at the age of 9 months. In the sense of Hofer`s theory, the authors interpret that maternal behavior exerts a direct influence on physiological activation in early development. However, its impact decreases with the establishment of internal structures of psychobiological regulation.

Hofer`s proposed development model of internalization of psychobiological regulation functions can be expanded and, as a basic model for the development, can take on other functions of self-regulation, in particular the control of affects. The question of how the modulation and establishment of internal structures of affect regulation comes into being in early mother-child interaction is a key topic of recent attachment research. The clinical significance of the findings primarily collected in observation-scientific grounded developmental psychology lies in the fact that there is ample evidence that patients with chronic pain syndromes (similar to other clinical groups) are often exposed to adverse psychosocial development conditions. The prevalence of sexual abuse, ill-treatment, and deprivation were examined as isolated "indicators" of such a matrix of unfavorable conditions (Egle, 2003). There was clear evidence that abuse, deprivation, and etcetera are common events in pain patients` biographies and that they are involved in the pathogenesis of the disorder in the sense of an increased vulnerability. However, the individual links in the chain of these pathogenetic conditions are not yet clear. Some of the features described above as part of the affect regulation disorder in somatoform patients can yet be better classified by means of attachment theory.

The current view is that the acquisition of competences necessary for the regulation of emotional states, analogous to the regulation of physiological homeostasis, is embedded in the mother-child relationship and takes place during early interactions. Although a newborn possesses inherent and increasingly differentiated mechanisms for self-regulation (Tronick, 1989), it needs external support. He/she cannot control the arousal level without help. The task of the primary attachment figure is to support the infant in the process of developing self-regulation ability (Sroufe, 1997). In this process, mother and child establish an affective communication system (Beebe, Jaffe, & Lachmann, 1992). The external assistance for affect regulation is increasingly internalized in the course of the child`s development. Here, the quality of the early bonding experience is crucial.

Sroufe (1990, 1997) suggested interpreting the early mother-child bond as a "dyadic system of affect regulation". Thus, the child learns to evaluate contexts in terms of familiarity or threat, and acquires strategies for stress modulation (Sroufe, 1997). Other attachment researchers, like Cassidy (1994), support a more functionalist perspective of affect regulation. According to this theory, the child masters emotions by means of an adaptive strategy. Its primary goal is to maintain the relationship with the attachment figure (Cassidy, 1994). Dealing with potentially negative emotions, which could jeopardize the attachment, plays a particular role in emotin regulation. Along this line, binding strategies are largely identical with strategies for the regulation of emotions. Attachment behavior does not only serve as protection from external danger, as originally proposed by Bowlby in the context of behavior-biological assumptions, but it also serves as protection against internal danger, i.e. the endangerment of the relationship to the

primary attachment figure by negative affects. This, for example, becomes evident in the behavior of insecure avoiding attached children during the reunification in the strange situation.

In summary, it can be assumed today that the ability to control affects is of central importance for the developmental, psychopathologic understanding of multiple disorders and that it develops in close entanglement with the attachment system. Although it is highly likely that specific hardware components of the affect system are congenital, modulation processes take place during early mother-child interaction. Their internalization leads to later observed individual differences of affect processing.

Pain and attachment

The relationship between pain and attachment can be analyzed on three different levels.

1. Pain can be understood as sensation and affect with a direct relationship-regulating function. At this level, it is related to the expressive content and the relationship-regulating significance of pain.

2. Chronic pain can be understood as a consequence of dysregulated attachment experience. This perspective considers the individual attachment experience with regard to vulnerability for the development of chronic pain.

3. Finally, chronic pain can be viewed in relation to the effect it has on an individual's social relationships. This perspective concentrates less on the development conditions of pain, than its consequences. However, since our focus is mainly on the development of psychogenic pain, we will not further elaborate on the last point.

In order to investigate individual differences in the mental representation of attachment in adulthood, (George, Kaplan, & Main, 1985) developed a method in the eighties which is referred to as the Adult Attachment Interview (AAI). Among approximately 15 half-open questions, 1 question was geared towards the experiences gained in dealing with affliction and pain with the primary attachment figure. The background of this question is the fact that the expression of pain is, similar to the expression of fear, a key signal to activate nurturing behavior. Nurturing behavior is the behavior system complementary to the attachment behavior system on the part of the primary attachment figure. Bowlby had already assumed this complementarity in biologically preformed behavior systems. It was above all Ainsworth et al. (1978) who later identified the importance of maternal sensitivity for the development of a secure attachment.

The question whether the attachment figure responds promptly and adequately to the attachment signals of a child is a question of maternal sensitivity. The expression of pain has, with regard to the current relationship, an expressive function; it includes the request for support and comfort. In the event of non-appearance, the signal is amplified.

When asked about pain experiences during childhood and the reaction of the attachment figures, patients with chronic pain often state that they cannot remember situations where they were in need of help, or they report in a normalizing manner without any detectable emotional movement that they received what was necessary. It becomes clear, that the affects linked to the mentioned episodic memories are either not accessible or greatly downregulated. Viewed superficially, an image of "normality" is created, but one that depicts the features of an emotional emptiness discussed above (alexithymia).

While the description of individual differences in binding behavior during childhood was based on behavior observations through the strange situation, the study of attachment in adulthood by means of the AAI focuses on how attachment security and attachment insecurity present themselves in the medium of language in a dyadic conversational situation. It is evident that the study approach shows a close resemblance to a psychoanalytic conversational situation. The essential criterion for determining whether an adult conversation partner is securely or insecurely attached is not

determined by the content of the described interaction experiences with the primary binding persons, but rather by the form of narrative through which the experiences become accessible in the course of the interview.

In secure-attached probands, the focus of attentiveness changes automatically back and forth between the current conversational situation and the account of the attachment experiences. The image of the experiences is multifaceted and coherent. This means there are hardly any contradictions and inconsistencies between the general characterization of the attachment persons and experienced (reported) episodes. Securely attached speakers appear cooperative in answering the questions; their report is authentic and balanced. This balance of description often arises from the fact that the speaker adopts a quasi-constructivist position in relation to their experiences. The speaker shows that their view of the experience or their judgment of the motivations and conduct of the people from their childhood has changed over time, for instance due to newly added insights.

In insecure attached speakers, indications point to a lower coherence of the narrative. In the insecure avoidant attachment representation, this is linked to a general reduced accessibility to the emotional content of past experiences, often associated with a tendency to normalize particularly negative, painful experiences with primary attachment figures. A persisting, anger-filled entanglement is apparent. These probands lack inner distance to experiences of their attachment history activated by the interview. The incoherence of their narrative is primarily caused by excessive detailed descriptions of attachment experiences in which the change of focus between autobiography and the current conversational situation is hindered by the intensity of the remaining anger-filled entanglement with the primary attachment figures.

Presently, a large number of studies are available on the distribution of different types of attachment representations in clinical groups (Dozier, Stovall, & Albus, 1999). The results show an increased prevalence of insecure forms of attachment representations in clinical groups. However, there are only limited findings demonstrating a differential affinity of the different forms of insecure attachment to individual disorders.

For somatoform disorders, and especially somatoform pain disorders, the higher prevalence of insecure attachment patterns has been confirmed (Slawsby, 1995; Wentzel, Offenbcher Sigl, Stucki, Butollo, 2001; Waller, Scheidt, & Hartmann, 2004). In addition, a higher frequency of the insecure avoidant attachment pattern can be observed in somatoform disorders.

Relating the findings of the attachment organization to the above presented considerations concerning affect regulation in somatoform disorders, it can be expected that pain patients and other patients with functional disorders show a tendency to downregulate their affective expression, which corresponds to the affect regulation in avoidant attachment behavior. Studies on the differential connections between affect regulation and attachment style in fact confirm that an avoided binding strategy correlates with higher values of alexithymia (Waller, Scheidt, & Waller unpublished).

The development of attachment is therefore of central importance for a vulnerability model of psychogenic pain syndromes. In addition to the studies showing a high prevalence of infantile negative factors in pain disorders (see above), studies on the development of attachment also show that the somatization process is encouraged by the type of affect regulation disorder associated with insecure attachment. However, it should not be ignored that only one line of pathogenesis is being described. Further attachment factors are beyond the present article`s subject and include cognitive aspects as well as conditions of the medical treatment context that often encourage a chronification of pain disorders.

Therapeutic consequences

The analytical psychotherapy of somatoform disorders is the gradual retranslation of physical symptoms separated from the inner experience into the subjective experience. This process leads via the activation of intense feelings of guilt, shame, and grief. Treatment modifications of the usual approach in analytical psychotherapy are often, particularly in the initial phase, necessary because patients with somatoform disorders are not open in the first instance to processing unconscious conflicts in the context of a transference relationship. The treatment is initially mostly limited to alleviating the symptoms.

An active and symptom-based approach namely focused on pain behavior is part of the technique modification required in the initial phase of treatment (Scheidt, 2002, 2003). It enables patients to gradually change their views on the nature of their complaints (namely, the idea that these are exclusively physically explained). Only when the investigation scope of connections between physical complaints and mental experience has increased can the engagement with the underlying conflict dynamics be initiated.

According to the above-presented theoretical considerations, the processing of the affect regulation disorder plays a central role in pain patients. It has priority over the processing of individual conflict contents. As already mentioned, pain symptoms are associated with restrictions on the affect perception in different ways and at different levels of the structural level. The connection of separated affects with the associated relationship episodes plays a major role regulatory. This is of course easier if it involves pain symptoms on a more integrated structural level, meaning the better introspective capabilities of the patients, more differentiated affect perception, and less distorted object images by projections.

With pain disorders, which, according to Hoffmann and Egle (1989) taxonomy, trigger pain in terms of a narcissistic regulatory mechanism, the object images are often distorted by considerable projections. The ability for a differentiated affect perception is low. The clarification of interpersonal conflicts that provoked the development of symptoms plays a central role in these treatments.

The focus of the treatment here is less on the clarification of the inner pattern of experience and relationship formation (e.g., within the transference relationship) than on the objective of a gradual differentiation and correction of projective biased interpersonal relationships. For this purpose, it is often necessary to actively work on a cognitive and affective clarification and integration of interpersonal relationship constellations, in which patients had become involved and had led to vast emotions of anger and disappointment.

The mobilization of intense countertransference effects is part of the treatment of pain patients. It is in the nature of separated emotions, which are also inaccessible to one`s own experience, that they enter the therapeutic communication and countertransference. The spectrum of countertransference reactions ranges in view of the symptoms from helplessness to anger and feelings of guilt to resignation and depression all affects that are triggered in the therapist by means of a projective identification. As in other analytic psychotherapy, it is also important that the therapist can provide the function of affect containment. The pain binds diverse, non-integrated emotions, which must be accommodated and "metabolized" by the therapist.

The therapeutic function can also be described with the terms of the binding theory; secure, base, and sensitivity. The process of therapy is less about reconstructive or transference interpretations than, within a corrective emotional experience, about achieving a gradual change of the internal working models of attachment. This change does not primarily affect the circumscription of specific contents of the autobiographical memory, but instead a change in procedurally-memorized,

automatically-running patterns of relationship formation. This is achieved via integration of separated affects which are gradually linked with important, anchored relationship experiences, both inside and outside the therapeutic relationship.

Other consequences for therapy result from the high prevalence of avoidant insecure binding representations. Patients with insecure avoidant attachment are to a greater extent reliant on affective mirroring, encouragement, and support than secure attached individuals. Insecure avoidant binding behavior develops in response to hidden rejection by the primary attachment figure. Avoidance is a compromise between approach and aversion. In light of experiences with the primary attachment figure of insecure avoidant attached patients, a high degree of abstinence from the therapist is perceived as daunting and makes the initial start of therapy difficult or impossible. One can hardly speak of this transfer in a narrow sense; at least the type of transfer reflects fewer experiences with the primary binding figure at the level of an already established complete internal image. It reflects rather more global, still uncontoured aspects of early interaction. The change in this pattern takes place through the repeated contrasting between past and present relationship reality. This contrasting integrates also reconstructive interpretations, but it goes beyond that.

The psychotherapeutic treatment of pain patients requires the consideration of further aspects that cannot be described in detail here. This includes the coordination of psychotherapy with other concurrent, medical treatments. If it does not succeed in adjusting the treatment objectives and methods between the parties involved, the risk arises of contrary and uncoordinated activities interfering with one another and hindering their effectiveness. This applies especially to the planning of the analgesic therapy, whose objective and scope should be coordinated with the psychotherapy; changes in medication can, depending on the nature and extent, become a disturbing factor (e.g., opioid medication). A realistic goal with the patient should also be discussed at the beginning of treatment. Considerations are parameters playing, almost regularly, a role in this group of patients and should thus be proactively involved in treatment planning.

Unfortunately, the psychoanalytic treatment of pain patients is today still a desideratum. Although we know considerably more about the psychodynamics than twenty years ago, depth psychological and psychoanalytical psychotherapists do not hesitate to accept pain patients. On the other hand, these patients may (on the basis of the above-presented conditions of the illness`s development, which reach far back into their personality development in the long term) most likely benefit from a depth psychological or analytical psychotherapy. It is to be hoped that more depth psychological and analytical trained psychotherapists venture into the treatment of this large group of patients in the future.

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Conflict of Interests

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