

Antisocial Personality Disorder

J. Reid Meloy, Ph.D.

Antisocial personality disorder is the most reliably diagnosed condition among the personality disorders, yet treatment efforts are notoriously difficult. Therapeutic hope has not vanished, however, and one study indicated that almost two-thirds of psychiatrists think that “psychopathic disorder” is sometimes a treatable condition (Tennent et al. 1993). A similar finding was reported nearly 40 years ago (Gray and Hutchison 1964). Diagnostic refinement is critical before any treatment efforts are undertaken, especially the determination of the degree of psychopathy in the patient with or without DSM-IV-TR antisocial personality disorder.

■ Psychodiagnostic Refinements

The DSM-IV-TR (American Psychiatric Association 2000) diagnosis of antisocial personality disorder continues the relatively young “social deviancy” tradition of defining chronic antisocial behavior that began with DSM-II (American Psychiatric Association 1968). Robins and Regier (1991) determined that antisocial personality disorder, as

Section 11: Personality Disorders

defined by DSM-III (American Psychiatric Association 1980), had an average duration of 19 years from first to last symptom. This latter finding strongly suggests that in most individuals with antisocial personality disorder, remission will occur in time, an important prognostic factor.

ELIMINATE THIS TABLE.

The older, “clinical” tradition for understanding antisocial personality disorder refers to the term *psychopathy* or *psychopathic personality* and was most thoughtfully delineated by Cleckley (1941/1976). It is distinguished by attending to both manifest antisocial behavior and personality traits, the latter described as the callous and remorseless disregard for the rights and feelings of others (Hare 1991) or aggressive narcissism (Meloy 1992). Hare (1991, 2003) and his colleagues developed a reliable and valid clinical instrument for the assessment of psychopathy. The 20 criteria composing the Psychopathy Checklist—Revised (PCL-R) are shown in Table 82–1. This is a unidimensional observational scale that quantifies clinical interview and historical data on the patient. Each item on this instrument is scored 0-2 for goodness of fit. Individuals scoring 30 or more on the PCL-R are considered psychopaths for research purposes (Hare, 1991, 2003). For clinical use, a range of 10-19 would be considered mild psychopathy, 20-29 would be considered moderate psychopathy, and 30 or above would be considered severe psychopathy. All licensed mental health professionals, including psychiatrists, should receive formal training before using this instrument to ensure reliability of scoring.

After antisocial personality disorder has been diagnosed, or when antisocial traits or behaviors are shown by history that do not meet the DSM-IV-TR threshold for the diagnosis, the severity of psychopathy should be determined by using the PCL-R or its corollary screening version (SV), the PCL-SV (Hart and Hare 1995). A substantial body of research has shown that, at most, only one out of three patients with antisocial personality disorder has

Antisocial Personality Disorder

severe psychopathy, and this latter group has a significantly poorer treatment prognosis than do patients with mild to moderately psychopathic antisocial personality disorder (Hare 1991). Axis I conditions are also likely to accompany antisocial personality disorder (Robins and Regier 1991), but psychopathy appears to be independent of most Axis I conditions. The exception is alcohol and other substance abuse and dependence (Hart and Hare 1989; Smith and Newman 1990). Psychopathy is not synonymous with behavioral histories of criminality or the categorical diagnosis of antisocial personality disorder, although it is often a correlate of both in severe cases.

Most self-report psychological tests are inherently unreliable in diagnosing antisocial personality disorder because of the propensity for these patients to deceive the clinician, but there are exceptions. The Minnesota Multiphasic Personality Inventory–2 (Hathaway and McKinley 1989), the Millon Clinical Multiaxial Inventory–III (Millon 1996), and the Rorschach test (Exner 1993) are very helpful in understanding the current psychodynamics, personality structure, and treatability of the patient (Gacono and Meloy 1994; McCann and Dyer 1996; Pope et al. 1993).

Given the action-oriented nature of these patients and the likelihood of head injury, neurological and neuropsychological impairments also must be ruled out. Such impairments may exacerbate clinical expressions, such as the physical violence of this character pathology. Measurable intelligence is independent of psychopathy but will influence the expression of chronic antisocial behavior (Hare 2003).

Table 82-1. Psychopathy Checklist—Revised

1. Glibness/superficial charm
2. Grandiose sense of self-worth
3. Need for stimulation/proneness to boredom
4. Pathological lying
5. Conning/manipulative
6. Lack of remorse or guilt
7. Shallow affect
8. Callous/lack of empathy
9. Parasitic lifestyle
10. Poor behavioral controls
11. Promiscuous sexual behavior
12. Early behavioral problems
13. Lack of realistic long-term goals
14. Impulsivity

Section 11: Personality Disorders

15. Irresponsibility
16. Failure to accept responsibility for own actions
17. Many short-term marital relationships
18. Juvenile delinquency
19. Revocation of conditional release
20. Criminal versatility

Source. Reprinted from Hare R: The Hare Psychopathy Checklist—Revised Manual. Toronto, Ontario, Multi-Health Systems, 1991. Copyright © 1990, 1991 by Robert D. Hare, Ph.D., under exclusive license to Multi-Health Systems Inc. 1990, 1991. All rights reserved. In the USA, 908 Niagara Falls Blvd., North Tonawanda, NY 14120-2060, 1-800-456-3003. In Canada, 3770 Victoria Park Ave., Toronto, ON M2H 3M6, 1-800-268-6011. Internationally +1-416-492-2627. Fax +1-416-492-3343. Used with permission.

■ General Treatment Findings

There is as yet no body of controlled empirical research concerning the treatment of antisocial personality disorder or psychopathy. Also, no demonstrably effective treatment is available, although this finding does not prove the null hypothesis that no treatment will ever exist for these troublesome conditions (Hare, 2003; Ogloff et al. 1990).

Meta-analytic studies of the effectiveness of treatment in juvenile delinquents, however, have consistently found a modest overall positive effect (Lipsey, 1992). The most useful treatments are skill-based and behavioral, targeting higher-risk offenders in the community (Rice and Harris 1997). Research on effective treatments for adult offenders indicates that a well designed and implemented program can reduce the risk of recidivism (Losel, 1995). Programs which have the largest effect size focus on risk (those patients at greatest risk of reoffending), need (dynamic criminogenic factors), and responsivity (individual characteristics that cause offending) (Andrews, 1995). The effect sizes are typically one-half of the overall effects in meta-analyses of psychological interventions in general (Simon 1998).

A review of the research on the treatment of antisocial personality disorder indicates that these patients have a poor response to hospitalization. The prognosis may be improved, however, if a treatable anxiety or depression is present (Gabbard and Coyne 1987). Patients with antisocial personality disorder also show a worse response to alcohol and other drug rehabilitation programs than do patients without antisocial personality disorder (Poldrugo and Forti 1988). An early positive assessment of the helping alliance by both the patient with antisocial personality disorder and the psychotherapist is significantly related to overall treatment outcome (Gerstley et al. 1989). Impulsive, aggressive, and antisocial traits in males have been associated with low blood glucose nadir, low autonomic reactivity during stress, high CSF testosterone, high serum testosterone, and a disturbed 5-HT turnover (Svanborg, Mattila-Evenden, Gustavsson, Uvnas-Moberg & Asberg, 2000).

A review of the treatment research concerning criminal psychopathic patients, who have

Antisocial Personality Disorder

the most severe form of antisocial personality disorder according to the criteria of Hare (2003) (see Table 82–1), indicates that these individuals are generally viewed as untreatable by clinical and legal professionals but are frequently segregated and referred for treatment (Quality Assurance Project 1991). In an early 10-year controlled outcome study, psychopathic individuals treated in a prison therapeutic community showed significantly *more* recurrences of violent offenses than did untreated psychopathic individuals (Rice et al. 1992)—a negative treatment effect. This treatment program, however, was unusual and bizarre. Subsequent research has not definitively answered the question of a negative treatment effect for psychopathy (D’Silva, Duggan & McCarthy, 2004), and one large study of psychopathy in a civil outpatient psychiatric setting indicates that it did not diminish the positive treatment effect for violence of traditional mental health care (Skeem, Monahan & Mulvey, 2002). Salekin (2002) conducted a meta-analysis of 44 studies of a broad range of correctional treatments with various samples of psychopathic subjects and found an overall positive treatment effect. Lengthier and more intensive treatments were significantly more effective.

■ Treatment Planning

Once the severity of psychopathy has been assessed in the patient with antisocial personality disorder and any other Axis I or III treatable conditions have been identified, four clinical questions should guide further psychiatric involvement with the patient:

1. Is the treatment setting secure enough to contain the relative severity of the psychopathic disturbance in the patient with antisocial personality disorder? If it is, therefore ensuring the safety of both patient and staff, treatment planning can begin, depending on the available resources. If it is not, staff may be put physically at risk by a decision to commence treatment. Political and bureaucratic pressures may be brought to bear on clinicians to “treat” currently untreatable patients with antisocial personality disorder and severe psychopathy, and a “not to treat” decision may entail a variety of personal and professional dilemmas.
2. What personality characteristics, gleaned from clinical research on patients with antisocial personality disorder or psychopathy, are relevant to the treatment planning for this particular patient?
3. What are the emotional reactions that the clinician can expect in him- or herself when attempting to clinically treat or help risk manage (if no treatment is being attempted) this patient?
4. What specific treatment approaches, if any, should be applied to this patient, given the resources available and the degree of containment necessary to effectively intervene?

Each of the latter three questions is addressed in turn in the sections that follow.

■ Personality Characteristics and Treatment Prognosis

Anxiety and Attachment

Early laboratory evidence supported the clinical view that some psychopathic criminals did not experience anxiety and worry to the degree that nonpsychopathic criminals did (Hare and Schalling 1978; Lykken, 1957). Recent research indicates a weak and inconsistent relationship between self-reported anxiety, fear, and psychopathy (Schmitt & Newman, 1999). However, laboratory research indicates that psychopaths are less fearful and learn to avoid punishment less readily than others (Hare, 2003).

Anxiety is a necessary correlate of any successful mental health treatment that depends on interpersonal methods, because it marks a capacity for internalized object relations and may signal other affects. As the severity of psychopathy increases in patients with antisocial personality disorder, anxiety likely lessens, and with it the personal discomfort that can motivate a patient to change.

Attachment, or the capacity to form an emotional bond, is suggestively less in severely psychopathic criminals than in mild to moderately psychopathic criminals (Fonagy, Target, Steele, Steele, Leigh, Levinson & Kennedy, 1997; Frodi, Dernevik, Sepa, Philipson & Bragesjo, 2001; Gacono and Meloy 1994; Meloy, 2002). This finding is empirically consistent with the clinical literature, which has described the psychopathic individual as chronically emotionally detached (Reid et al. 1986). It appears that chronic emotional detachment varies in severity among patients with antisocial personality disorder, is a measurable trait of the psychopathic patient with antisocial personality disorder, and is a stable characteristic that is already seen in solitary-aggressive children with conduct disorder (Frick, Cornell, Barry, Codin & Dane, 2003; Gacono and Meloy 1994).

The ability to form an alliance with the therapist, a behavior related to attachment, has been shown to be a positive prognostic marker in the psychotherapeutic treatment of males with antisocial personality disorder (Gerstley et al. 1989). This ability was especially associated with decreased drug use and increased employment. Without an attachment capacity, any treatment that depends on the emotional relationship with the psychotherapist will fail and may pose an explicit danger to the professional because a lack of empathy for the therapist will not inhibit aggression. The more severe the psychopathy, the more the patient will relate to others on the basis of power rather than affection (Meloy 1988). The psychobiological basis for the diminution of anxiety and attachment may be rooted in chronic cortical underarousal (Raine, 1993).

Narcissism

Psychopathic patients can be conceptualized as aggressive narcissists, with the attendant intrapsychic object relations, structure, and defenses that have been described in the psychoanalytic literature (Kernberg 1992; Meloy 1988). In a clinical and treatment setting, the more severe the psychopathic disturbance in the patient with antisocial

Antisocial Personality Disorder

personality disorder, the greater the likelihood that aggressive devaluation will be used to shore up feelings of grandiosity and repair emotional wounds. In some patients, this is defensive, whereas in others, a core, injured sense of self is not apparent. This behavioral denigration of others can run the clinical spectrum from subtle, verbal insults to the rape and homicide of a female staff member. It also distinguishes the psychopathic patient from the narcissistic patient, who can devalue in fantasy (Kernberg 1975) without resorting to the infliction of emotional or physical pain on others. Although male outpatients with narcissistic personality disorder are as self-absorbed and grandiose as are psychopathic patients, their anxiety and attachment makes them much better treatment candidates (Gacono et al. 1992).

In addition to the devaluation of others, the severity of psychopathy will determine the degree to which the patient will try to control other patients and staff. This “omnipotent control” in the actual clinical setting, often felt by staff as being “under the patient’s thumb” or “walking on eggshells,” usually serves the purpose of stimulating the severe psychopath’s grandiose fantasies and also warding off his fears of being controlled by malevolent forces outside him- or herself. When the grandiosity of the mild to moderately psychopathic patient with antisocial personality disorder is challenged by failure, there will be clinical manifestations of anxiety or depression, both of which are positive prognostic indicators (Gabbard and Coyne 1987).

Cognition in patients with antisocial personality disorder is characterized by moderate and pervasive formal thought disorder that appears to be psychodynamically linked to narcissism; for example, the need to self-aggrandize leads to circumstantial or tangential comments about the self that are only remotely related to the clinical task (Gacono and Meloy 1994).

Psychological Defenses

Antisocial personality disorder patients with severe psychopathy most predictably use the following psychological defenses: projection, devaluation, denial, projective identification, omnipotence, and splitting (Gacono and Meloy 1994; Hare 2003). For instance, projective identification is most apparent in treatment when the psychopathic patient attributes certain negative characteristics to the clinician and then attempts to control the clinician, perhaps through overt or covert intimidation. An aspect of the psychopathic patient’s personality is then perceived in the clinician and viewed as a threat that must be diminished. One patient with antisocial personality disorder who also had severe psychopathy reported to his psychotherapist several homicides that he had ostensibly committed. He then sat back, smiled, and said, “You know a lot about me, doc, and sometimes when people know too much they get killed.” The speechless psychotherapist felt frightened and controlled.

Higher-level or neurotic defenses, such as idealization, intellectualization, isolation, sublimation, and repression, appear to be virtually absent in the patient with antisocial personality disorder and severe psychopathy (Gacono 1990). If neurotic defenses are present in the patient with antisocial personality disorder, they suggest amenability to treatment. Internal experience will more likely be expressed with thought rather than just through feeling and impulse.

Object Relations

The severely psychopathic patient's internal representations of self are aggressive and larger than life—he is a legend in his own mind. At the same time he does not represent others as whole, real, and meaningful individuals deserving of respect and empathy, but as objects to dominate and exploit. Patients with antisocial personality disorder who are mild to moderately psychopathic may see themselves as injured or devalued, and their grandiosity may be defensive and easily punctured.

The treatment implications of these object relations surround the risk of violence by the patient with antisocial personality disorder. The more psychopathic he or she is, the more pleasurable, less conflicted, and more sadistic aggressive acts will be (Dietz et al. 1990; Holt et al. 1999). Unlike the patient with borderline personality disorder, in whom impulses to aggress against the self or others may be frightening, the psychopathic patient may wholly identify with the aggressor (A. Freud 1936/1966) and have no inhibitions. A history of violence, coupled with the predatory nature of their violence, makes antisocial personality disorder patients with severe psychopathy very dangerous in a hospital milieu without appropriate security (Gacono et al. 1995, 1997).

Affects

The emotions of the patient with antisocial personality disorder lack the subtlety, depth, and modulation of “normal” individuals. The antisocial personality disorder patient with severe psychopathy appears to live in a “presocialized” emotional world, where feelings are experienced in relation to the self but not to others. Such a patient is unlikely to have a capacity to experience emotions, such as reciprocal pleasure, gratitude, empathy, joy, sympathy, mutual eroticism, affection, guilt, or remorse, that depend on whole object relations. The patient's emotional life instead is dominated by feelings of anger, sensitivities to shame or humiliation, envy, boredom, contempt, exhilaration, and pleasure through dominance. The more psychopathic the patient with antisocial personality disorder, the more apparent his or her limited emotional repertoire will be to the clinician, evident in the coarseness, suddenness, and rapid dissipation of raw affect.

Affective dysfunction in the psychopathic patient is apparent in his or her inability to understand the emotional or connotative meaning of words (Williamson et al. 1991; Kiehl, Smith, Hare, Mendrek, Forster, Brink & Liddle, 2001), and in less of a startle blink reflex in response to both pleasant and unpleasant stimuli (Patrick et al. 1993). Both male and female adults with antisocial personality disorder appear to modulate affect about as well as a 5- to 7-year-old child (Gacono and Meloy 1994).

These findings pose difficult treatment problems, but their absence in any one patient should support a more positive prognosis. Such findings in the patient with antisocial personality disorder and severe psychopathy predict treatment failure for modalities that depend on emotional access to the patient, such as cognitive-behavioral relapse prevention or psychodynamic approaches that require a capacity to feel emotion in relation to the psychotherapist and talk about it. In these cases, treatment should not be attempted. Most troublesome and difficult to detect is the psychopathic patient who imitates certain emotional states for secondary gain or to manipulate the psychotherapist.

Antisocial Personality Disorder

This rewarding of the clinician, often by appealing to the clinician's narcissistic belief that he or she can heal the most difficult patient, has been called "malignant pseudoidentification" (Meloy 1988, p. 139) and may be used to describe other ways in which the psychopathic patient deceptively represents himself or herself as having feelings, thoughts, and behaviors wished for by the treating clinician.

Superego Pathology

The touchstone of psychopathy and antisocial personality disorder has been the absence of conscience, or serious deficits in moral judgment (Cleckley 1941/1976; Hare 1991; Johnson 1949; Robins 1966). Although few controlled studies of moral development in psychopathy have been done (Hare, 2003; Trevethan and Walker 1989), clinicians agree that this characteristic is a marker for the character pathology (Kernberg 1984; Meloy 1988; Reid et al. 1986).

The presence of any superego development, whether a prosocial ego ideal (a realistic, long-term goal) or clinical evidence of a socially desirable need to rationalize antisocial acts, is a positive prognostic sign. Certain mild to moderately psychopathic patients with antisocial personality disorder may show evidence of harsh and punitive attitudes toward the self and assume a masochistic attitude toward the clinician. This signifies some internalized value and attachment capacity. Antisocial personality disorder patients with severe psychopathy are likely to behave cruelly toward others and show no need to justify or rationalize their behaviors. Such individuals should not be considered for a treatment setting because they place both staff and genuinely mentally ill patients at risk.

■ The Clinician's Reactions to the Patient

Lion (1978), Symington (1980), Strasburger (1986), Meloy (1988, 2001), and Gabbard (2005) explored the clinician's response to the psychopathic or antisocial personality disorder patient. Table 82-2 lists nine common countertransference reactions to such a patient. They are likely to occur regardless of the treatment modality being applied and will be felt more intensely when psychopathy is more severe in the antisocial patient. These are reactive emotions and thoughts and should not be construed as necessarily implicating a conflict in the clinician. Such subjective reactions can be used as an impetus for further objective testing, a re-evaluation of the appropriateness of the selected treatment, or in some cases the cessation of treatment.

Table 82-2. Common countertransference reactions to the patient with antisocial personality disorder

1. Therapeutic nihilism (condemnation)
2. Illusory treatment alliance
3. Fear of assault or harm (sadistic control)
4. Denial and deception (disbelief)

5. Helplessness and guilt
 6. Devaluation and loss of professional identity
 7. Hatred and the wish to destroy
 8. Assumption of psychological maturity
 9. Fascination, excitement, or sexual attraction
-

Therapeutic Nihilism

Lion (1978) used the term *therapeutic nihilism* to describe the rejection of all patients with an antisocial history as being completely untreatable. Instead of arriving at a treatment decision based on a clinical evaluation, including an assessment of the severity of psychopathy, the clinician devalues the patient as a member of a stereotyped class of “untouchables.” The clinician does to the patient with antisocial personality disorder what the patient does to others. Symington (1980) called this *condemnation*, and it psychoanalytically reflects the clinician’s identification with this aspect of the patient’s character.

Illusory Treatment Alliance

The opposite reaction to therapeutic nihilism is the illusion that there is a treatment alliance when, in fact, there is none. Often these perceptions of the patient are the psychotherapist’s own wishful projections. Although the presence of an alliance is a favorable prognostic indicator (Gerstley et al. 1989), in antisocial personality disorder patients with severe psychopathy, it should not be expected. Behaviors that suggest such an alliance should be viewed with clinical suspicion and may actually be imitations to please and manipulate the psychotherapist. The chameleon-like quality of the psychopathic patient is well documented (Greenacre 1958; Meloy 2001). Bursten (1973) elaborated on the “manipulative cycle” of the psychopathic patient, which leads to a feeling of contemptuous delight in these patients when successfully carried out. The clinician is left with feelings of humiliation and anger.

Fear of Assault or Harm

Strasburger (1986) noted that both reality-based and countertransference fears may exist in response to the antisocial personality disorder patient with severe psychopathy. Real danger should not be discounted and is most readily evaluated by using contemporary measures to assess the risk of violence (Monahan, Steadman et al., 2001). Countertransference fear is an atavistic response to the psychopathic patient as a predator and may be viscerally felt as “the hair standing up on my neck” or the patient “making my skin crawl.” These are phylogenetically evolved autonomic reactions that may also signal real danger, even in the absence of an overt threat. They appear to be widespread among clinicians working with psychopathic patients (Meloy and Meloy, 2002). A

Antisocial Personality Disorder

related clinical feature is overt sadistic triumph over the psychotherapist, what Kernberg (1984) cites as a symptom of “malignant grandiosity.”

Denial and Deception

Denial in the psychotherapist is most often seen in counterphobic responses to real danger. Lion and Leaff (1973) suggested that it is a common defense against anxiety generated by violent patients. It may also be apparent in the unwillingness of mental health clinicians to participate in the prosecution of a psychopathic patient who has seriously injured someone (Hoge and Gutheil 1987), in the underdiagnosis of antisocial personality disorder (Gabbard 2005), or in clinicians’ disbelief that the patient has an antisocial history (Symington 1980) or that psychopathy even exists at all (Vaillant 1975). This reaction may lead to splitting or contentiousness among mental health staff, especially in hospital settings. It is most obvious in clinical records in forensic hospitals when a patient is referred to as having “allegedly” committed a certain crime after he or she has been tried and convicted by a judge or jury.

Deception of the patient with antisocial personality disorder is most likely to occur when the psychotherapist is frightened of the patient, especially of the patient’s rage if certain limits are set surrounding treatment. It may also indicate superego problems in the clinician, the avoidance of anxiety, passive-aggressive rejection of the patient, or an identification with the deceptive skills of the patient with antisocial personality disorder. Rigorous honesty without self-disclosure is the treatment rule with antisocial personality disorder patients.

Helplessness and Guilt

The novice clinician may especially feel helpless or guilty when the patient with antisocial personality disorder does not change despite treatment efforts. These feelings may originate from the psychotherapist’s narcissistic belief in his or her own omnipotent capacity to heal, what Reich (1951) called the “Midas touch syndrome.” Strasburger (1986) noted that these feelings may be transformed into rage that is passively expressed as withdrawal or an attempt to smother the patient with heroic treatment efforts and attention.

Devaluation and Loss of Professional Identity

If therapeutic competency is measured only through genuine change in the patient, the patient with antisocial personality disorder will be a source of continuous professional disappointment and narcissistic wounding. In long-term treatment, the psychopathic patient’s intransigence may compel the clinician to question his or her own professional identity. Bursten (1973) noted that, despite the psychotherapist’s most adept management of the patient’s contempt, it is difficult not to feel despicable and devalued because of the primitive, preverbal nature of the patient’s manipulative cycle. Emotional responses to the patient may range, in this context, from retaliation and rage to indifference or submission.

Hatred and the Wish to Destroy

One psychiatric resident recalled the embarrassing dream of being with a hospitalized antisocial personality disorder patient he was treating as they both stormed through the hospital with flame throwers, destroying everything in sight. No other patient will compel psychotherapists to face their own aggressive and destructive impulses like the severely psychopathic patient with antisocial personality disorder. Because these patients often hate goodness itself and will destroy any perceived goodness (such as empathy) offered by the clinician, the latter may react by identifying with the patient's hatred and wish to destroy. It may become a source of understanding and relating to the patient if brought into consciousness rather than acted upon (Gabbard 1996; Galdston 1987).

Assumption of Psychological Maturity

The most subtle countertransference reaction is the clinician's belief that the patient with antisocial personality disorder is as developmentally mature and complex as the clinician, and that the patient's actual maturity only has to be facilitated by, and discovered in, treatment. This is particularly common when no Axis I diagnosis is present and the patient has an above-average IQ. Certain aspects of IQ and ego functioning are not related, and the severely psychopathic patient with a very superior IQ, through glibness and superficial charm (see Table 82-2), may mask a borderline personality organization (Kernberg 1984).

FASCINATION, EXCITEMENT, OR SEXUAL ATTRACTION

Some clinicians are strongly drawn to the antisocial personality disordered or psychopathic patient, and provide an eager audience whom he can regale with his prowess and exploits. Such an idealizing countertransference can also be sexualized, which may invite an exceedingly dangerous encounter, especially between a male psychopath and a female psychotherapist. Young mental health professionals will often be enamored with criminal forensic work for the sensation-seeking it promises and the unconscious identifications with psychopathy which it invites. What is forbidden is often what is most desired. If clinicians come to understand the fantasized extremes of their own aggressive and hedonistic desires, this fascination will often devolve into more realistic boredom, and then the clinical task becomes maintaining interest in a patient who offers little hope for change (Meloy & Reavis, 2006).

Understanding and management of these emotional reactions to patients with antisocial personality disorder, whether psychopathic or not, will not only increase staff safety but also contribute to diagnosis and treatment planning. Such countertransference reactions are most readily explored in individual or group supervision or in carefully led clinical staff meetings in which a wide range of emotional reactions toward patients are tolerated and accepted. Clinicians who are resistant to any understanding of their own emotional lives in relation to these patients should not be treating them and may put other mental health professionals at risk. As Meloy (1988) wrote, "The interpersonal encounter

Antisocial Personality Disorder

with the patient fundamentally defines the humanity, or lack of humanity, of the treatment: a task that is most rigorously tested when the psychopathic patient is commonly perceived, at least in part, as inhuman” (p. 340).

■ Specific Treatment Approaches

Despite the absence of a body of controlled outcome data, certain treatment modalities are more effective than others in patients with antisocial personality disorder who are not severely psychopathic. Although a standardized assessment instrument such as the PCL-R should be utilized to make such a distinction, clinical indicators of the *absence* of severe psychopathy in the antisocial personality disordered patient include the ABC of anxiety, bonding, and conscience. The effectiveness of a modality will depend on the treatment goals, which should be conservative at best.

Pharmacotherapy

Although as yet there are no data showing that antisocial personality disorder can be altered with medication, certain symptoms and behaviors in the patient with antisocial personality disorder may respond to pharmacological intervention if medication compliance is heightened through institutional or community supervision (Markowitz, 2001). Schizophrenic patients with antisocial personality disorder are most effectively treated with decanoate medications if there is a clinical choice. In hospital settings, the antisocial personality disorder patient who has anxiety or depression, a contraindication of severe psychopathy, may show prognostic improvement if medically treated for these symptoms (Gabbard and Coyne 1987), but it may not decrease his risk for violence.

By far the most troublesome symptom of antisocial personality disorder is violence, which is significantly more frequent in the severely psychopathic patient (Hare and McPherson 1984). Eichelman (1988) delineated a rational pharmacotherapy for aggression and violence based on four biological systems (Table 82–3).

Table 82-3. Pharmacotherapeutic effects on violence and aggression

Biological system	Action	Suggested medication
γ -Aminobutyric acid system	Inhibits affective aggression	Benzodiazepines
Noradrenergic system	Enhances affective, inhibits predatory aggression	Lithium, propranolol
Serotonergic system	Inhibits affective and predatory aggression	Lithium, fluoxetine
Electrical “kindling”	Enhances affective and predatory aggression	Phenytoin, carbamazepine

Source. Data from Eichelman 1988.

Section 11: Personality Disorders

Reis (1974) labeled, and Eichelman (1992), Meloy (1988, 1997, 2006), and McEllistrem (2004) elaborated upon the physiological, pharmacological, and forensic distinction between “affective” and “predatory” aggression. These psychobiologically different modes of violence are most relevant to antisocial personality disorder and psychopathy, although they are not inclusive and should not be considered a standardized clinical nosology for aggression (Eichelman and Hartwig 1993). Affective aggression is a mode of violence that is accompanied by high levels of sympathetic arousal and emotion (usually anger or fear) and is a reaction to an imminent threat. Predatory aggression is a mode of violence that is accompanied by minimal or no sympathetic arousal and is emotionless, planned, and purposeful. Research has shown that severely psychopathic criminals are more likely than mild to moderately psychopathic criminals to engage in both affective and predatory violence when the PCL-R is utilized as a measure of severity (Cornell et al., 1996; Serin 1991; Walsh 1999; Williamson et al. 1987; Woodworth & Porter, 2002).

Appropriate pharmacological intervention with antisocial personality disordered patients or psychopathic patients involves an analysis of the mode of violence in which the patient has engaged and the selection of medications that have been shown to inhibit the relevant mode of violence. Anticonvulsants, such as phenytoin, may inhibit only affective aggression (Barratt et al. 1997; Stanford et al., 2001). The serotonin agonists appear to inhibit both types of aggression (Eichelman 1988). Serotonergic dysfunction may account for prominent symptomatology in many patients with antisocial personality disorder, particularly their decreased ability to inhibit learned responses in the face of punishment; impulsivity; emotional dysregulation (Lewis 1991); assaultiveness; and dysphoria (Coccaro et al. 1989; Moss et al. 1990). Eichelman (1988) and others (Karper and Krystal 1997; Knorrning and Ekselius 1998) have proposed that psychiatrists who pharmacologically treat violent patients address the primary illness first, initially use the most benign interventions, quantify the efficacy of their treatment (such as nursing observation scales), and institute each drug as a single variable into treatment if at all possible.

Family Therapy

Parent management training (Patterson 1986), structured family therapy (Alexander and Parsons 1982), and multisystemic therapy (Henggeler et al., 1998) have been shown to be effective in children with conduct disorder. There is no published research on family therapy with adult patients who have antisocial personality disorder, whether psychopathic or not. The use of family therapy when one of the participating adults is a severely psychopathic patient with antisocial personality disorder or a severely psychopathic individual who does not meet the criteria for antisocial personality disorder is not advised. Information learned by the individual from both the therapist and other family members is likely to be used to hurt and control in the service of sadism and omnipotent fantasy (Meloy 1992). Treatment efforts should focus on the physical, economic, and emotional safety of the other family members, whether spouse, children, or elderly parents.

Mild to moderately psychopathic adults with antisocial personality disorder may benefit from family therapy and are most likely to be seen when the child with conduct

Antisocial Personality Disorder

disorder is the identified patient. Such work may have a positive effect on the intergenerational transmission of the disorder, a likely combination of both early social learning and psychobiology (Sutker et al. 1993). Reductions in criminal recidivism as a result of family therapy have been reported (Gendreau and Ross 1987). A genuine capacity to bond to the other family members, attempts to be a responsible spouse or parent, and clinical expressions of anxiety, dysphoria, or genuine affection during the treatment are positive prognostic indicators for the adults with antisocial personality disorder in family therapy. Continuous acting-out, however, should be expected and monitored through collateral contacts.

Milieu and Residential Therapy

Reviews of treatment programs to reduce recidivism of convicted offenders, of whom 50%–75% will meet the criteria for antisocial personality disorder, identify three guiding principles: 1) programs are most effective when they target moderately high-risk individuals; 2) treatment is most effective when criminogenic issues are addressed, such as antisocial values and attitudes, peer relationships with other criminals, chemical dependencies, and vocational-educational deficits; and 3) treatment should teach and strengthen interpersonal skills and model prosocial attitudes (Rice et al. 1996). The term *milieu* is used to describe any treatment method in which control of the environment surrounding the antisocial individual is the primary agent for change. Human behavior is strongly influenced by its consequences, and this occurs regardless of whether the results are intended or the influence is deliberate. The clinician chooses to leave this to chance, or to purposefully control the environment, if he or she can, as a therapeutic tool. Three milieu or residential approaches are promising for the treatment of antisocial personality disorder.

The first approach, *token economy programs*, has been empirically found to shape patient and staff behavior within institutions (Rice et al. 1990). Although effective, such programs may be legally challenged by patients with antisocial personality disorder on the basis of an arguable constitutional right to avoid unwanted therapy. Despite their declining popularity, they have no serious competition as a system of behavioral management in hospitals. Evidence also indicates that the more typically unstructured hospital ward may actually harm patients by promoting psychotic, aggressive, and dependent behaviors (Positano et al. 1990).

The second approach, the *therapeutic community*, was originally developed by Jones (1956) in England a half century ago. Members of the community care for one another, follow the rules, submit to the authority of the group, and are rewarded or disciplined by the group. The primary intervention in the therapeutic community is the daily group meeting, which functions both as a psychotherapeutic and as a policy-making body. Peer problem solving is encouraged, and staff are facilitators of this largely democratic group culture. Although few controlled studies of therapeutic communities have been done, they have shown modest positive effects (Harris and Rice 1994).

When offenders within therapeutic communities are classified as either psychopathic or nonpsychopathic based on the criteria of the PCL-R (Hare 2003; Table 82–1), the results are striking. Ogloff et al. (1990) found that the scores on the PCL-R were both

Section 11: Personality Disorders

postdictive and predictive of treatment outcome in a Canadian therapeutic community for adult male offenders. Individuals in the psychopathic group were less motivated to change their behavior and had a higher attrition rate. In contrast, individuals in the nonpsychopathic group became less angry, less hostile, less anxious, and less depressed and were more socially at ease and more assertive in interpersonal relationships. The study did not include a control group.

Hare, Clark, Grann & Thornton (2000) found similar results in a large prospective study of offenders in England and Wales treated with a variety of short term treatment programs. Treatment had little effect on mild to moderate psychopaths when their post release conviction rates were measured; but those psychopaths with substantial interpersonal and affective deficiencies (factor one of the PCL-R) recidivated at a much *higher* rate if they had received treatment than if they had not received treatment.

The third approach, *wilderness programs*, uses nature as the milieu both to reinforce individual responsibility and to stimulate group cohesion. Although there are no controlled outcome studies of their effectiveness in changing antisocial personality disorder or, for that matter, criminal recidivism, it is likely that the effect size would be modest. The capacity of the subject to form an attachment or bond with the group and the experience of anxiety or fear in the face of natural danger would be favorable prognostic indicators. The severity of psychopathy would probably predict treatment failure and an absence of generalization of the newly learned, prosocial behaviors once the individual returned to the community.

Cognitive-Behavioral Therapy

Relapse prevention theory, a structured form of cognitive-behavioral therapy, has been associated with successful correctional treatment programs (Andrews et al. 1990). The premise of the theory (Marlatt and Gordon 1985) is that the targeted behavior, in this case antisocial behavior, is learned, motivated, and reinforced by internal factors within the patient and external factors within the environment. Internal motivators encompass thoughts, feelings, perceptions, and fantasies, whereas external motivators may include alcohol or stimulants, weapons (Hunter and Love 1993), or an available pool of victims (Meloy 1988). Reinforcers may be either positive or negative and internal or external. For example, an internal positive reinforcer could be a heightened level of autonomic arousal that results from sensation-seeking behavior. A discrete antisocial behavior is preceded by a chain of events that, if not interrupted, leads to relapse. Various treatment methods arise from this model to teach the antisocial individual to implement new cognitive and behavioral strategies and to break this cognitive-behavioral chain.

Patients with antisocial personality disorder are likely to respond to this method of treatment if they are motivated to change and it is used in a milieu or residential setting. This is most predictable in the mild to moderately psychopathic patient with antisocial personality disorder who normatively responds to aversive consequences and has felt the emotional and practical pain of his or her antisocial acts. It is unlikely to have any effect on the severely psychopathic patient with antisocial personality disorder because of deficits in passive avoidance learning (inhibiting new behavior when faced with punishment), the inability to foresee the long-term consequences of his or her actions,

Antisocial Personality Disorder

and the lack of capacity to reflect on the past. The cognitive deficits of the psychopathic patient, such as moderate formal thought disorder (Gacono and Meloy 1994) and impairments in understanding the connotative meaning of words (Hare 2003), would also attenuate the degree of success achieved with this mode of therapy.

Despite these cautionary findings, Wong and Hare (2005) have devised guidelines for a psychopathic treatment program which is based upon the risk-need-responsivity principles outlined by Andrews (1995). It employs cognitive-behavioral methods of treatment based upon a modified social information processing model and the demonstrated efficacy of relapse prevention (Dowden et al., 2003). Wong and Hare (2005) argue that resources are better utilized when directed at high risk offenders, and when they target dynamic factors directly linked to criminality and violence. They spurn attempts to change the character pathology or temperament of the psychopath. No outcome data for their comprehensive program are currently available.

Cognitive-behavioral and social learning techniques are the most frequently used methods for treating antisocial individuals. Gacono et al. (2000) recommended the following essentials for such treatment programs: clear and unambiguous rules and consequences are established and enforced, life skills and cognitive skills that are taught are congruent with the patients' developmental levels, cognitive distortions and criminal lifestyle patterns are identified and modified, tolerance for affect and the effect of the patients' behaviors on others are addressed, and treatment continuity is established on release into the community.

When such patients are ordered into forensic hospitals by the courts, strict behavioral controls should be used to manage behavior, and any clinical improvement should be viewed with great skepticism. All judicially committed patients, whether inpatient or outpatient, should be assessed for degree of psychopathy given the power of the construct to predict treatment outcome and violence risk (Hare, 2003). Meloy (1988) identified the following five clinical features that contraindicate mental health treatment of any kind:

1. History of sadistic and violent behavior
2. Total absence of remorse
3. Intelligence two standard deviations from the mean
4. No history of attachments
5. Fear of predation on the part of experienced clinicians without any overtly threatening behavior by the patient

These are clinical guidelines and are not the result of controlled empirical research. The presence of a treatable Axis I condition, such as schizophrenia (Nolan et al., 1999), in a patient with these characteristics poses an ethical dilemma for the psychiatrist. Successful remission of the Axis I mental disorder through the use of medication may contribute to better organization of the psychopathy and greater danger toward the milieu.

Psychodynamic Approaches

There is no clinical evidence that psychopathic or antisocial personality disordered patients will benefit from any form of psychodynamic psychotherapy, including the expressive or supportive psychotherapies (Kernberg 1984), psychoanalysis, or various

Section 11: Personality Disorders

psychodynamically based group psychotherapies. However, psychodynamic treatment of antisocial personality disorder should be differentiated from psychodynamically *understanding* the patient with antisocial personality disorder when other, more promising modes of treatment are applied, such as those noted earlier. Psychodynamic understanding of the patient with antisocial personality disorder (Gabbard 1994; Meloy 1988) assumes that unconscious determinants play a major role in behavior. It also embraces a “levels” (Stone and Dellis 1960) approach to both understanding and treating personality disorder. In other words, treatment efforts target, or at least acknowledge, the multiple and simultaneous levels that influence observable, clinical behavior: psychobiology, unconscious psychodynamics, conscious thought, and the environment. In the case of a patient with antisocial personality disorder, this conceptualization could translate into psychopharmacological intervention to minimize affective violence (psychobiology), the process of thinking about and discussing with staff the aggressive narcissism of the patient and its countertransference effect (psychodynamics), active treatment of the patient with relapse prevention that focuses on the internal and external motivators for antisocial acts (conscious thought), and the choice of a maximum-security milieu treatment program within which the treatment occurs (environment). Approaches that ignore other “levels” or determinants of personality-disordered behavior are likely to fail and often are used because of the preferred treatment “philosophy” of the team leader, even in the absence of empirical data (Yochelson and Samenow 1977).

■ Conclusions

Treatment and management of antisocial personality disorder test the clinician’s mettle. Although these patients rarely seek medical care for their personality disorder—only one out of seven will ever discuss their symptoms with a doctor (Robins and Regier 1991)—concurrent problems will bring them into treatment, whether voluntary or not.

The comprehensive care of the patient with antisocial personality disorder involves six principles:

1. During the initial diagnostic workup, the severity of psychopathy of the patient with antisocial personality disorder should be determined, with a clinical focus on the presence of anxiety, bonding, and conscience.
2. Any treatable conditions, such as Axis I mental or substance abuse disorders, should be identified.
3. Situational factors that may be aggravating or worsening the antisocial behaviors need to be delineated.
4. The mental health professional must recognize the likelihood of legal problems and potential legal entanglements, even if they are initially denied.
5. Most important, treatment should begin only if it is demonstrably safe and effective for both the patient and the clinician. This would generally rule out any attempts to psychiatrically treat the severely psychopathic antisocial patient with any brief, traditional treatment modality. Medical treatment of such a patient’s major mental disorder, if present, will usually result in better organization of the psychopathy and

Antisocial Personality Disorder

may create an increased risk of predatory violence.

6. Careful attention should be paid to all countertransference reactions, because they provide important insights into the inner world of the patient with antisocial personality disorder and the severity of his or her psychopathy.

As an anonymous Australian psychiatrist wrote,

Basically it is symptomatic relief, clear guidelines about expected behavior, treatment of any major psychotic illness, realistically accepting them as they are and trying extremely hard not to be too frightened of them. (Quality Assurance Project 1991, p. 545)

■ References

- Alexander J, Parsons B: *Functional Family Therapy*. Monterey, CA, Brooks/Cole, 1982
- American Psychiatric Association: *Diagnostic and Statistical Manual of Mental Disorders*, 2nd Edition. Washington, DC, American Psychiatric Association, 1968
- American Psychiatric Association: *Diagnostic and Statistical Manual of Mental Disorders*, 3rd Edition. Washington, DC, American Psychiatric Association, 1980
- American Psychiatric Association: *Diagnostic and Statistical Manual of Mental Disorders*, 4th Edition, Text Revision. Washington, DC, American Psychiatric Association, 2000
- Andrews D: The psychology of criminal conduct and effective treatment. In *What Works: Reducing Reoffending: Guidelines from Research and Practice*. Editor, McGuire J. Chichester, UK, Wiley & Sons, pp. 3-34.
- Andrews D, Zinger I, Hoge R, et al: Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology* 28:369-404, 1990
- Barratt ES, Stanford M, Feltous A, et al: The effects of phenytoin on impulsive and premeditated aggression: a controlled study. *J Clin Pharmacol* 17:341-349, 1997
- Bursten B: *The Manipulator*. New Haven, CT, Yale University Press, 1973
- Cleckley H: *The Mask of Sanity*. St. Louis, MO, CV Mosby, 1941 [reprint 1976]
- Coccaro EF, Siever LJ, Klar HM, et al: Serotonergic studies in patients with affective and personality disorders: correlates with suicidal and impulsive aggressive behavior. *Arch Gen Psychiatry* 46:587-599, 1989
- Cornell D, Warren J, Hawk G, Stafford E, Oram G, Pine D: Psychopathy in instrumental and reactive violent offenders. *J Consulting Clin Psychology* 64:783-90, 1996
- Dietz P, Hazelwood R, Warren J: The sexually sadistic criminal and his offenses. *Bull Am Acad Psychiatry Law* 18:163-178, 1990
- Dowden C, Antonowicz D, Andrews D: The effectiveness of relapse prevention with offenders: A meta-analysis. *Int J Offender Therapy and Comparative Criminology* 47:516-528, 2003
- D'Silva K, Duggan C, McCarthy J: Does treatment really make psychopaths worse? A review of the evidence. *J Personality Disorders* 18:163-177, 2004
- Eichelman B: Toward a rational pharmacotherapy for aggressive and violent behavior. *Hospital and Community Psychiatry* 39:31-39, 1988
- Eichelman B: Aggressive behavior: from laboratory to clinic. *Arch Gen Psychiatry* 49:488-492, 1992

Section 11: Personality Disorders

- Eichelman B, Hartwig A: The clinical psychopharmacology of violence. *Psychopharmacol Bull* 29:57–63, 1993
- Exner J: *The Rorschach: A Comprehensive System, Vol 1: Basic Foundations*, 3rd Edition. New York, Wiley, 1993
- Fonagy P, Target M, Steele M, Steele H, Leigh T, Levinson A, Kennedy R: Morality, disruptive behavior, borderline personality disorder, crime, and their relationship to security of attachment. In *Attachment and Psychopathology*. Editors Atkinson L, Zucker K. New York, Guilford Press, pp. 223-274, 1997.
- Freud A: *The Ego and the Mechanisms of Defense* (1936), Revised Edition. New York, International Universities Press, 1966
- Frick P, Cornell A, Barry C, Bodin S, Dane H: Callous-unemotional traits and conduct problems in the prediction of conduct problem severity, aggression, and self-report of delinquency. *J Abn Child Psychology* 31:457-470, 2003
- Frodi A, Dernevik M, Sepa A, Philipson J, Bragesjo M: Current attachment representations of incarcerated offenders varying in degree of psychopathy. *Attachment and Human Development* 3:269-283, 2001
- Gabbard G: *Psychodynamic Psychiatry in Clinical Practice: The DSM-IV Edition*. Washington, DC, American Psychiatric Press, 2005
- Gabbard G: *Love and Hate in the Analytic Setting*. Northvale, NJ, Jason Aronson, 1996
- Gabbard G, Coyne L: Predictors of response of antisocial patients to hospital treatment. *Hospital and Community Psychiatry* 38:1181–1185, 1987
- Gacono C: An empirical study of object relations and defensive operations in antisocial personality disorder. *J Pers Assess* 54:589–600, 1990
- Gacono C, Meloy JR: *Rorschach Assessment of Aggressive and Psychopathic Personalities*. Hillsdale, NJ, Lawrence Erlbaum, 1994
- Gacono C, Meloy JR, Berg J: Object relations, defensive operations, and affective states in narcissistic, borderline, and antisocial personality disorder. *J Pers Assess* 59:32–49, 1992
- Gacono C, Meloy JR, Sheppard E, et al: A clinical investigation of malingering and psychopathy in hospitalized insanity acquittees. *Bull Am Acad Psychiatry Law* 23:1–11, 1995
- Gacono C, Meloy JR, Speth E, et al: Above the law: escapes from a maximum security psychiatric hospital and psychopathy. *J Am Acad Psychiatry Law* 25:547–550, 1997
- Gacono C, Nieberding R, Owen A, et al: Treating juvenile and adult offenders with conduct disorder, antisocial, and psychopathic personalities, in *Treating Adult and Juvenile Offenders With Special Needs*. Edited by Ashford J, Sales B, Reid W. Washington, DC, American Psychological Association, 2000
- Galdston R: The longest pleasure: a psychoanalytic study of hatred. *Int J Psychoanal* 68:371–378, 1987
- Gendreau P, Ross R: Revivification of rehabilitation: evidence from the 1980s. *Justice Quarterly* 4:349–407, 1987
- Gerstley L, McLellan T, Alterman A, et al: Ability to form an alliance with the therapist: a possible marker of prognosis for patients with antisocial personality disorder. *Am J Psychiatry* 146:508–512, 1989
- Gray K, Hutchison H: The psychopathic personality: a survey of Canadian psychiatrists' opinion. *Canadian Psychiatric Association Journal* 9:452–461, 1964
- Greenacre P: The imposter. *Psychoanal Q* 27:359–382, 1958

Antisocial Personality Disorder

- Hare R: Electrodermal and cardiovascular correlates of psychopathy, in *Psychopathic Behavior: Approaches to Research*. Edited by Hare R, Schalling D. Chichester, UK, Wiley, 1978, pp 107–143
- Hare R: *The Hare Psychopathy Checklist—Revised Manual*. Toronto, ON, Multi Health Systems, 1991
- Hare R: *Hare Psychopathy Checklist—Revised (PCL-R): 2nd edition Technical Manual*. Toronto, Multihealth Systems, 2003
- Hare R, Clark D, Grann M, Thornton D: Psychopathy and the predictive validity of the PCL-R: An international perspective. *Beh Sciences and the Law* 18:623-645, 2000
- Hare R, McPherson L: Violent and aggressive behavior by criminal psychopaths. *Int J Law Psychiatry* 7:35–50, 1984
- Harris G, Rice M: Assessment, treatment and community management of violence, in *Handbook of Prescriptive Treatments for Adults*. Edited by Ammermann RT, Hersen M. New York, Plenum, 1994, pp 463–486
- Hart S, Hare RD: Discriminant validity of the Psychopathy Checklist in a forensic psychiatric population. *Psychological Assessment* 1:211–218, 1989
- Hart S, Hare RD: *The Hare Psychopathy Checklist: Screening Version*. Toronto, ON, Multi Health Systems, 1995
- Hathaway SR, McKinley JC: *Minnesota Multiphasic Personality Inventory—2*. Minneapolis, MN, University of Minnesota, 1989
- Henggeler SW, Schoenwald S, Borduin C et al: *Multisystemic Treatment of Antisocial Behavior in Children and Adolescents*. New York, Guilford, 1998
- Hoge S, Gutheil T: The prosecution of psychiatric patients for assaults on staff: a preliminary empirical study. *Hospital and Community Psychiatry* 38:44–49, 1987
- Holt S, Meloy JR, Strack S: Sadism and psychopathy in violent and sexually violent offenders. *J Am Acad Psychiatry Law* 27:23–32, 1999
- Horowitz MJ: *Person Schemas and Maladaptive Interpersonal Patterns*. Chicago, IL, University of Chicago Press, 1991
- Hunter M, Love C: Types of weapons and patterns of use in a forensic hospital. *Hospital and Community Psychiatry* 44:1082–1085, 1993
- Johnson A: Sanctions for superego lacunae of adolescents, in *Searchlights on Delinquency*. Edited by Eissler K. New York, International Universities Press, 1949, pp 225–245
- Jones M: The concept of a therapeutic community. *Am J Psychiatry* 112:647–650, 1956
- Jones M: *The Process of Change*. Boston, MA, Routledge & Kegan Paul, 1982
- Karper LP, Krystal JH: Pharmacotherapy of violent behavior, in *Handbook of Antisocial Behavior*. Edited by Stoff D, Breiling J, Maser J. New York, Wiley, 1997, pp 436–444
- Kernberg O: *Borderline Conditions and Pathological Narcissism*. New York, Jason Aronson, 1975
- Kernberg O: *Severe Personality Disorders: Psychotherapeutic Strategies*. New Haven, CT, Yale University Press, 1984
- Kernberg O: *Aggression in Personality Disorders and Perversions*. New Haven, CT, Yale University Press, 1992
- Kiehl K, Smith A, Mendrek A, Forster B, Hare R, Liddle P: Temporal lobe abnormalities in semantic processing by criminal psychopaths as revealed by functional magnetic resonance imaging. *Psychiatry Research: Neuroimaging* 130:27-42, 2004

Section 11: Personality Disorders

- Knorrning L, Ekselius L: Psychopharmacological treatment and impulsivity, in *Psychopathy: Antisocial, Criminal, and Violent Behavior*. Edited by Millon T, Simonsen E, Birket-Smith M, et al. New York, Guilford, 1998, pp 359–371
- Lewis C: Neurochemical mechanisms of chronic antisocial behavior (psychopathy). *J Nerv Ment Dis* 179:720–727, 1991
- Lion J: Outpatient treatment of psychopaths, in *The Psychopath: A Comprehensive Study of Antisocial Disorders and Behaviors*. Edited by Reid W. New York, Brunner/Mazel, 1978, pp 286–300
- Lion J, Leaff L: On the hazards of assessing character pathology in an outpatient setting. *Psychiatr Q* 47:104–109, 1973
- Lipsey M: The effect of treatment on juvenile delinquents: results from meta-analysis. Editors, Loesel F, Bender D, Bliesener T. *Psychology and Law: International Perspectives*. Pp. 131–143. Berlin, NY, Walter de Gruyter, 1992
- Losel F: The efficacy of correctional treatment: A review and synthesis of meta-evaluations. In McGuire J, editor. *What Works? Reducing Reoffending: Guidelines from Research and Practice*, pp. 79–111. Chichester, UK, Wiley and Sons, 1995
- Lykken D: A study of anxiety in the sociopathic personality. *J Abn Social Psychology* 55:6–10, 1957
- Markowitz P: Pharmacotherapy. In Livesley WJ, editor. *Handbook of Personality Disorders*, pp. 475–493. New York, Guilford, 2001
- Marlatt G, Gordon J (eds): *Relapse Prevention: Maintenance Strategies in the Treatment of Addictive Behaviors*. New York, Guilford, 1985
- McCann J, Dyer F: *Forensic Assessment With the Millon Inventories*. New York, Guilford, 1996
- McEllistrem J: Affective and predatory violence: a bimodal classification system of human aggression and violence. *Agg Violent Behavior* 10:1–30, 2004
- Meloy JR: *The Psychopathic Mind: Origins, Dynamics and Treatment*. Northvale, NJ, Jason Aronson, 1988
- Meloy JR: *Violent Attachments*. Northvale, NJ, Jason Aronson, 1992
- Meloy JR: Predatory violence during mass murder. *J Forensic Sci* 42:326–329, 1997
- Meloy JR: *The Mark of Cain*. Hillsdale, NJ, Analytic Press, 2001
- Meloy JR: Pathologies of attachment, violence, and criminality. In Goldstein A, editor. *Handbook of Psychology, Volume 11: Forensic Psychology*. Pp. 509–526. New York, Wiley 2002
- Meloy JR: The empirical basis and forensic application of affective and predatory violence. *Australian and New Zealand J Psychiatry*, __:_____, 2006
- Meloy JR, Meloy MJ: Autonomic arousal in the presence of psychopathy: A survey of mental health and criminal justice professionals. *J Threat Assessment* 2:21–33, 2002
- Meloy JR, Reavis J. The dangerous cases: when treatment is not an option. In: JB Van Luyn, S Akhtar, J Livesley, eds. *Severe Personality Disorders: Major Issues in Everyday Practice*. London: Cambridge University Press, 2006.
- Millon T: *Disorders of Personality DSM-IV and Beyond*. New York, Wiley, 1996
- Monahan J, Steadman H, Silver E et al: *Rethinking Risk Assessment*. London, Oxford, 2001
- Moss H, Yao J, Pansak G: Serotonergic responsivity and behavioral dimensions in antisocial personality disorder with substance abuse. *Biol Psychiatry* 28:325–338, 1990
- Nolan KA, Volavka J, Mohr P, et al: Psychopathy and violent behavior among patients with schizophrenia and schizoaffective disorder. *Psychiatr Serv* 50:787–792, 1999

Antisocial Personality Disorder

- Ogloff J, Wong S, Greenwood A: Treating criminal psychopaths in a therapeutic community program. *Behav Sci Law* 8:181–190, 1990
- Patrick C, Bradley M, Lang P: Emotion in the criminal psychopath: startle reflex modulation. *J Abnorm Psychol* 102:82–92, 1993
- Patterson G: Performance models for antisocial boys. *Am Psychol* 41:432–444, 1986
- Poldrugo F, Forti B: Personality disorders and alcoholism treatment outcome. *Drug Alcohol Depend* 21:171–176, 1988
- Pope K, Butcher J, Seelen J: *The MMPI, MMPI-2 and MMPI-A in Court*. Washington, DC, American Psychological Association, 1993
- Positano S, Sandford D, Elzinga R, et al: Virtue rewarded: reinforcement and punishment in an acute psychiatric admission ward. *J Behav Ther Exp Psychiatry* 21:257–262, 1990
- Quality Assurance Project: Treatment outlines for antisocial personality disorder. *Aust N Z J Psychiatry* 25:541–547, 1991
- Raine A: *The Psychopathology of Crime*. San Diego, CA, Academic Press, 1993
- Reich A: On countertransference. *Int J Psychoanal* 32:25–31, 1951
- Reid W, Dorr D, Walker J, et al: *Unmasking the Psychopath*. New York, WW Norton, 1986
- Reis D: Central neurotransmitters in aggression. *Research Publications—Association for Research in Nervous and Mental Disease* 52:119–148, 1974
- Rice ME, Harris G: The treatment of adult offenders, in *Handbook of Antisocial Behavior*. Edited by Stoff D, Breiling J, Maser J. New York, Wiley, 1997, pp 425–435
- Rice M, Harris G, Quinsey V, et al: Planning treatment programs in secure psychiatric facilities, in *Law and Mental Health: International Perspectives*. Edited by Weisstub D. New York, Pergamon, 1990, pp 162–230
- Rice M, Harris G, Cormier C: An evaluation of a maximum security therapeutic community for psychopaths and other mentally disordered offenders. *Law Hum Behav* 16:399–412, 1992
- Rice M, Harris G, Quinsey V, et al: Treatment of forensic patients, in *Mental Health and the Law: Research, Policy, and Services*. Edited by Sales B, Shah S. New York, Carolina Academic Press, 1996
- Robins L: *Deviant Children Grown Up: A Sociological and Psychiatric Study of Sociopathic Personality*. Baltimore, MD, Williams & Wilkins, 1966
- Robins L, Regier D: *Psychiatric Disorders in America*. New York, Free Press, 1991
- Salekin R: Psychopathy and therapeutic pessimism: clinical lore or clinical reality? *Clinical Psychology Review* 22:79–112, 2002
- Schmitt W, Newman J: Are all psychopathic individuals low-anxious? *J Abn Psychology* 108:353–358, 1999
- Serin R: Psychopathy and violence in criminals. *Journal of Interpersonal Violence* 6:423–431, 1991
- Shapiro D: *Neurotic Styles*. New York, Basic Books, 1965
- Simon LMJ: Does criminal offender treatment work? *Applied Preventive Psychology* 7:137–159, 1998
- Skeem J, Monahan J, Mulvey E: Psychopathy, treatment involvement, and subsequent violence among civil psychiatric patients. *Law and Human Behavior* 26:577–603, 2002
- Smith S, Newman J: Alcohol and drug abuse-dependence disorders in psychopathic and nonpsychopathic criminal offenders. *J Abnorm Psychol* 99:430–439, 1990
- Stanford M, Houston R, Mathias C, Greve K, Villemarette-Pittman N, Adams D: A double-blind placebo controlled crossover study of phenytoin in individuals with impulsive aggression. *Psychiatry Research* 103:193–203, 2001

Section 11: Personality Disorders

- Stone H, Dellis N: An exploratory investigation into the levels hypothesis. *Journal of Projective Techniques* 24:333–340, 1960
- Strasburger L: Treatment of antisocial syndromes: the therapist's feelings, in *Unmasking the Psychopath*. Edited by Reid W, Dorr D, Walker J, et al. New York, WW Norton, 1986, pp 191–207
- Sutker P, Bugg F, West J: Antisocial personality disorder, in *Comprehensive Handbook of Psychopathology*, 2nd Edition. Edited by Sutker P, Adams H. New York, Plenum, 1993, pp 337–369
- Svanborg P, Mattila-Evenden M, Gustavsson P, Uvnas-Moberg K, Asberg M: Associations between plasma glucose and DSM-III-R Cluster B personality traits in psychiatric outpatients. *Neuropsychobiology* 41:79-87, 2000
- Symington N: The response aroused by the psychopath. *International Review of Psycho-Analysis* 7:291–298, 1980
- Tennent G, Tennent D, Prins H, et al: Is psychopathic disorder a treatable condition? *Med Sci Law* 33:63–66, 1993
- Trevethan S, Walker L: Hypothetical versus real-life moral reasoning among psychopathic and delinquent youth. *Dev Psychopathol* 1:91–103, 1989
- Vaillant G: Sociopathy as a human process. *Arch Gen Psychiatry* 32:178–183, 1975
- Walsh TC: Psychopathic and nonpsychopathic violence among alcoholic offenders. *International Journal of Offender Therapy and Comparative Criminology* 43:34–48, 1999
- Williamson S, Hare R, Wong S: Violence: criminal psychopaths and their victims. *Canadian Journal of Behavioral Sciences* 19:454–462, 1987
- Williamson S, Harpur T, Hare R: Abnormal processing of affective words by psychopaths. *Psychophysiology* 28:260–273, 1991
- Wong S, Hare R: *Guidelines for a Psychopathy Treatment Program*. Toronto, Multihealth Systems, 2005
- Woodworth M, Porter S: In cold blood: characteristics of criminal homicides as a function of psychopathy. *J Abn Psychology* 111:436-445, 2002
- Yochelson S, Samenow S: *The Criminal Personality*, Vol 1. New York, Jason Aronson, 1977