Kleptomania: Differential Diagnosis and Treatment Modalities

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Abstract: Kleptomania is classified in the psychiatric nomenclature as an impulse control disorder. Patients with kleptomania, however, often suffer from repetitive intrusive thoughts about stealing, an inability to avoid the compulsion to steal as well as a relief of tension following the theft. These associated symptoms suggest that kleptomania may be a form of obsessive compulsive spectrum disorder. On the other hand, some authors describe kleptomania as a non-pharmacological addiction because of the inability to control maladaptive behavior. A broad range of pharmacotherapeutic agents has been found to be beneficial in the treatment of kleptomania including serotonin reuptake inhibitors (SSRIs), mood stabilizers, and opioid receptor antagonist medications. Adjuvant cognitive behavioral therapy (CBT) is recommended.

Keywords: Kleptomania, impulse control, addiction, obsessive-compulsive spectrum, SSRI.

INTRODUCTION

Kleptomania is believed to be a rare clinical condition. The symptoms may begin in adolescence to mid-life,with the average age of onset being the mid 20's. Late diagnosis following many years of suffering is the rule. The prevalence of kleptomania in the general population is hard to assess and is considered as 0.6-0.8% of the general population [1]. Estimates of true cases of kleptomania range from zero to eight percent of all shoplifters [2]. The syndrome is known to afflict women 2 to 3 times more than men [3], and some researchers see an association between kleptomanic acts and menstruation or the premenstrual period [4]. Kleptomania was classified in the DSM-IV of the American Psychiatric Association as an impulse control disorder not elsewhere classified [5], and in the International Classification of Diseases of the World Health Organization, it was classified under the heading of habit and impulse disorders [6] together with pathological gambling, pyromania and trichotillomania. Both of the classification systems are based on recurrent failure to resist the impulse to steal despite the ego-dystonic nature of the impulse and awareness of the wrongfulness of the act.

The pathological stealer differs from the ordinary thief in that the act of stealing is performed in order to achieve emotional relaxation and not personal gain. Tension is experienced before the act and in attempting to resist the impulse. Pathological stealing is impulsive and repetitive in its characterizations, resembling, as in obsessive-compulsive disorder, a struggle to oppose the drive - a struggle that evokes anxiety and tension. Patients typically suffer from emotional distress and impaired functioning in social and occupational areas.

Although recognized for over a century, the etiopathology of kleptomania is still unclear, and no biological studies have been reported. Isolated case reports offer hypotheses about possible biological causes. The onset of kleptomania has been associated with head trauma [7], frontal lobe damage [8], dementia [9], and hypoglycemia secondary to an insulinoma [10].

Kleptomania appears to be associated with other psychiatric comorbidities, most notably mood disorders, other impulse control disorders and substance abuse and dependence [11,12]. Hudson and Pope proposed a relationship between kleptomania and mood disorders, OCD, eating disorders, and panic disorders, terming them later as 'affective spectrum disorders' [13]. McElroy *et al*. [14] and Hollander and Wong [15] suggested that kleptomania is associated with strong compulsive and impulsive features, and hence, is considered a variant of the obsessive-compulsive spectrum disorders together with pathological gambling, compulsive buying, pyromania, nail biting, and trichotillomania. This view gains strength from the higher than normal rate of mood disorders, obsessive-compulsive disorders, and panic disorder in the first-degree relatives of kleptomanic patients [16]. The core fault in these disorders is at the level of brain neurotransmitters, with the main focus of research and therapeutic interest on serotonin levels.

Pharmacological intervention for impulse control disorders such as pathological gambling (PG), binge eating and trichotillomania has centered on the use of selective serotonin reuptake inhibitors [15]. The evidence for the use of SSRI in the field of impulse control disorders is only preliminary, however, with double-blind trials (particularly for compulsive buying and PG) failing to demonstrate their effectiveness. Similiarly, there is no clear concensus about the use of SSRIs in the treatment of kleptomania, for there have been no double- blind controlled studies on the use of SSRIs or other psychopharmacological agents for kleptomania.

Current data regarding the use of SSRIs in kleptomania is based on case reports, which taken as a group yeild conflicting results. McElroy *et al*. [17] in his classic case series (N=20) of patients with kleptomania, reported two cases of good response to fluoxetine although, in the same series, seven patients did not respond to fluoxetine. In

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1573-4005/06 $50.00+.00

another case series drawn from an out-patient population, Grant and Kim [18] reported that 8/15 patients had received fluoxetine pharmacotherapy (mean dose 50mg/day for 5.3 weeks), and 6/8 patients taking fluoxetine reported no change in kleptomanic symptom, while 2/8 reported a moderate improvement. The remaining 7/15 patients had been treated with other SSRIs, although none of the subjects taking paroxetine (N=2), citalopram (N=3), or fluvoxamine (N=2) reported changes in kleptomania symptoms. In contrast to these findings, Lepkifker *et al*. [19] reported that paroxetine (20 mg/d for a period of three months) reduced kleptomanic urges when used in combination with alprazolam monotherapy, and Kraus [20] reported a favorable response to paroxetine in a patient who had a long history (> 10 years) of kleptomania and comorbid major depression. Schwartz [21] reported a case of kleptomania which was successfully treated with high dose (80 mg/day) fluoxetine. Interestingly, the paradoxical emergence of kleptomania during SSRI treatment of depression has been reported in three cases [22].

McElroy's case series included patients who were treated with tricyclic or tetracyclic antidepressant agents [17]. McElroy reported four cases of kleptomania, which responded to trazodone, although treatment non-response to trazedone was seen in two cases. Imipramine monotherapy was not successful in three reported cases, and desipramine (one case)was also not found to be helpful. Nortriptyline, however, was shown to be beneficial in one case with full remission.

The case series reported by McElroy includes several descriptions of successful combination pharmacotherapy for the treatment of kleptomania. Imipramine combined with an SSRI was beneficial in two cases, and lithium in combination with fluoxetine resulted in improvement in 2/3 cases [17]. In a separate report, Fishbain described the beneficial effect of combination amitriptyline plus perphenazine in the treatment of kleptomania [23]. Kmetz [24] demonstrated that Valporal in combination with fluvoxamine was effective in treating a patient suffering from kleptomania with comorbid mixed mania, although in a separate case, combination therapy with clomipramine was not helpful in ameliorating kleptomanic symptoms [20].

Opioid antagonists are considered useful in reducing urge-related symptoms and have been used in the field of substance abuse as well as in the field of impulse control disorders [25]. Naltrexone is thought to mediate its therapeutic effect *via* the inhibition of dopamine release in the ventral tegmental (VTA) area of the prefrontal cortex. [26]. The VTA is considered to be the brain reward center, and according to animal studies, stimulation of this area is associated with the subjective experience of pleasure as well as cravings and urges [27].

The most commonly used opioid antagonist is naltrexone, a long-acting competitive opioid antagonist principally of MU, but also of Kappa and Lambda opioid receptors. A preliminary case series published by Kim [28] demonstrated that naltrexone was efficient in promptly reducing urges at dosage levels ranging from 100 to 200 mg/d, and that it was well tolerated in 15 patients diagnosed as suffering from impulse control disorders – including one case of kleptomania. The kleptomanic patient had comorbid OCD symptoms and experienced a significant decrease in her stealing urges within several days of naltrexone treatment (100 mg/d). The patient then achieved complete remission when the dose was increased to 150 mg/day. Dannon *et al*. [29] reported significant improvement in two kleptomanic patients (one suffering from concurrent OCD and the other, a pathological gambler) who received naltrexone for the treatment of kleptomania (as monotherapy or as an augmentation to paroxetine). Grant and Kim [30] in a 12 week open-label study of naltrexone for kleptomania demonstrated that by week 11, the treated patients had a decrease in urges to steal and in stealing behavior, and the patients had a statistically significant increase in social and occupational functioning. The mean naltrexone dose was 145mg/day, and nausea during the first week of treatment was the most bothersome side-effect. Liver function tests were monitored and remained stable throughout the study. In a recent retrospective study, Grant [31] showed that among 17 kleptomanic patients who received naltrexone for up to three years, a substantial percentage of patients reported clinically siginficant reduction in urges to steal and reduction in overall symptoms severity.

While elucidation of the biological underpinnings of kleptomania remains an active area of research, recent work has examined the role of psychodynamic factors in the etiopathology of kleptomania. Grant and Kim [32] examined temperament and early life experiences in a sample of 12 patients and found that the kleptomania subjects had significantly lower maternal and paternal care scores and lower maternal protection scores (neglectful parenting) than controls. Patients also had higher novelty-seeking scores and higher harm avoidance scores than normal controls. In another study, Bayle *et al*. [11] found that impulsivity was a major psychological feature of kleptomania and distinguished kleptomania from other impulse disorders. These finding suggest that behavioral therapy targeting impulsive behavior may represent a direction for future treatment.

Cognitive-behavioral therapy (CBT) has been found to be helpful in the treatment of impulse control disorders when used in combination with pharmacotherapy and has largely replaced the psychoanalytic and dynamic approaches [33]. CBT used in impulse control disorders consists of three components: 1) cognitive restructuring to correct irrational and dysfunctional beliefs that precede impulsive behavior, 2) problem solving skills aimed at generating alternative responses to stress, and 3) relapse prevention in which the patient was taught to identify and avoid high-risk situations. While, to our knowledge, there have been no reported cases of CBT in the treatment of kleptomania, CBT has been shown to have efficacy in the treatment of PG [33], as well as in major depressive disorder and a range of anxiety disorders.

Despite the fact that kleptomania is a disorder with devastating personal consequences including serious legal difficulties reflected in high rates of arrest and incarceration [34], the majority of patients do not actively seek treatment. Typically, it is a comorbid psychiatric disorder which causes the kleptomanic patient to request treatment. Pharmacological treatment of kleptomania is limited by the lack of controlled trials to guide the psychiatrist. Case

reports of treatment with SSRIs have shown a limited response at best, while case reports and one open label study appear to show more promising results for the opioid antagonist naltrexone. Interstingly, available data points to the usefulness of polypharmacy in the treatment of this disorder, for example, as discussed above, several case reports have shown the benefit of combination therapy with an antidepresssant agent plus naltrexone. In the future, it is hoped that data from phenomenology and comorbidity studies may be used in order to develop a system of subtyping patients. For example, patients may be subtyped on a scale of obsessional thinking and low risk taking at one end of the spectrum, to high levels of impulsive behavior at the other. Likewise, future pharmacological studies may look at the use of stimulants for the impulsive type patients, while SSRIs may be reserved for the obsessive subtypes. Family history of psychopathology may be further used to support subtyping of patients. Rigorous studies will be needed regarding optimal dosing of SSRIs, for it is possible that the lack of successs with SSRI pharmacotherapy as described in case studies to date may be due to the use of insufficient doses. It is possible that opioid antagonists may play a role as adjunctive agents regardless of patient subtype, for the reduction of pleasure associated with stealing in kleptomania may benefit a broad population kleptomania patients. Future studies on the pharmacotherapy of kleptomania may also benefit from a multicenter design in order to recruit higher numbers of subjects. Cognitive behavioral therapy focusing on the reduction of impulsivity and improved probem solving skills should be an essential component of any treatment plan for kleptomania. Finally, recent studies point out the need for improved screening for symptoms of kleptomania. Improved detection is an essential first step toward the goal of providing quality psychiatric care for kleptomania patients.

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Received: March 1, 2005 Revised: June 16, 2005 Accepted: July 1, 2005