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Overview of the treatment of rumination disorder for adults in a residential setting

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Abstract

Rumination, or the chewing and re-swallowing of regurgitated stomach contents, can be found in up to 10% of institutionalized individuals with severe or profound mental retardation. Serious physical consequences, including death, can result from the disorder. Unfortunately, rumination can be subtle and difficult to observe and often continues untreated. Additionally, the research literature has provided divergent results without clear treatment guidance for clinicians. We present an overview of the history of rumination, a review of the literature on its etiology and treatment, and recommendations for future research. © 1998 Elsevier Science Ltd. All rights reserved.

"Rumination" refers to the behavior of chewing and swallowing regurgitated stomach contents. Approximately 6 to 10% of institutionalized persons with severe or profound mental retardation ruminate regularly (Johnston and Greene, 1992; Rogers et al., 1992; Singh, 1981). Rumination can lead to serious medical complications, including malnutrition, weight loss, gastric disorders, upper respiratory distress, dental problems, aspiration, choking, and pneumonia (Clauser and Scibak, 1990; Konarski et al., 1992; Luiselli, 1989). In fact, it is estimated to be the primary cause of death in 5 to 10% of individuals who ruminate (Konarski et al., 1992). Additionally, because this behavior is repugnant to others it can contribute to social isolation and compromised attempts at community integration and normalization (Konarski et al., 1992). The purpose of this paper is to update the literature reviews on rumination published by Singh (1981) and Starin and Fuqua (1987). Included is a discussion of the history of the disorder, distinguishing characteristics in medical and behavioral diagnosis, a review of the research on treatment, and recommendations for further research.

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1. History

According to Parry-Jones (1994), the first clinical description of rumination was in 1618 by an Italian anatomist, Fabricious ab Aquapendente. It is speculated that the disorder was not described in medical documents prior to this time simply because it may not have been viewed as a disorder but as a culturally condoned, pleasurable practice (Parry-Jones, 1994). The description of this behavior as an abnormal, culturally shameful practice began to appear along with theories linking ruminators to bovine ancestry. Despite the failure of autopsies in the 1600s to find multiple stomachs, the linkage of rumination to bovine ancestry or degenerated, animal-like morphologies continued (Parry-Jones, 1994).

Scientific interest in ruminative behavior continued throughout the 18th and 19th centuries, when it became a method utilized by exhibitionists to make a living in freak shows and circuses (Parry-Jones, 1994). As the speculated etiology of bovine ancestry gradually lost its scientific appeal, the view of rumination as a degenerative *human* behavior emerged. By the late 18th century, some ruminators were described as malingerers and attention also turned toward the behavior in persons with mental retardation (Parry-Jones, 1994). By the early 20th century, scientific focus also turned to rumination in infants.

It is interesting to note that a historic construction of rumination as lower-level, animal-like behavior has persisted. The analyses of rumination as a manifestation of primal inner needs resulting in rudimentary behaviors may also reflect the degenerationism theory of the early 1900s (e.g., the "mark of the beast", as described by Gelb, 1995). As late as the 1970s, descriptions of this behavior can be found in the psychoanalytic literature as an expression of "primitive" impulses (Menolascino, 1972).

Attempts to control ruminative behavior did not occur until the 1950s and concentrated on infants' interpersonal relationships with their mothers (Davis et al., 1983). At first, the research and treatment of rumination was dominated by a psychodynamic approach, attributing the behavior to disruptions during the oral phase of development, poor ego development, or manifestations of rudimentary behavior patterns of lower functioning humans (Singh, 1981). Behavioral treatments gained attention during the 1960s when aversive behavioral procedures to control rumination in mentally retarded populations showed promise (Davis et al., 1983).

2. Diagnosis and treatment

It is important to distinguish rumination from other types of vomiting behaviors in order that proper treatments may be utilized. Oversight of physiologic etiology such as drug effects on laryngeal and oesophageal function, or gastro-oesophageal reflux due to structural defects, may result in life-threatening degeneration of health status while inappropriate treatments are implemented. We will consider three different approaches to diagnosis and treatment: medical, psychiatric, and behavioral.