

Dyspepsia in the middle ages: a reference in Giovanni Boccaccio's *Decameron* (14th century AD)?

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To the Editor,

For contemporary medicine, dyspepsia (literally “indigestion”) has become an umbrella term for a “symptom complex characterized by a predominant pain or discomfort in the epigastrium” and has been reported to have a prevalence of 5 to 40% in the population (1). Fresh research has also shown that >1/3 of dyspepsia patients test positive for *H. pylori* infection. Calculating diagnostic and therapeutical costs, a 2009 study demonstrated that the overall financial impact of dyspepsia amounted to 18.4 billion USD, while a study of seven years earlier had indicated a cost impact of 1 billion GBP in the United Kingdom alone (2). Consequently, this gastro-intestinal condition significantly contributes to the general health burden.

Our historical knowledge of dyspepsia is far from complete, however, especially because its genuine etiology remained unknown for centuries. Although medical references to it appeared among the ancient Greeks, physicians would have to wait for John Hemmeter's 1906 radiological description and Martin Haudek's 1910 account of gastric ulcers to be able to diagnose the condition correctly. The work of these two furthermore demonstrated that dyspepsia was not always associated with gastric or duodenal mucosal ulcerations (non-ulcer dyspepsia) (3).

We may glean some historical insight into the medieval diagnosis and therapy of dyspepsia from

a novella contained in the *Decameron* (the second of the tenth day), a masterpiece written by the medically learned scholar and poet Giovanni Boccaccio (1313-1375) (4, 5). The short story tells of the renowned Italian bandit Ghino di Tacco (ca. 1270-ca. 1303-13, Figure 1) who captures and imprisons the then-abbot of Cluny as the latter is headed to thermal waters near Siena to cure his stomach ailments, a practice commonly recommended by the medicine of those times. Ghino, having learned of the prelate's discomfort, eschews the baths and instead treats the patient in his own way over the next several weeks or more (4). Ghino orders the abbot to fast, allowing him each day no more than two slices of toasted bread and a large glass of Vernaccia da Corniglia wine (*due fette di pane arrostito e un gran bicchiere di vernaccia da Corniglia*), claiming that he had studied medicine as a young man and knew that there was “no better medicine for stomach ailments” (*niuna medicina al mal dello stomaco esser miglior*) (4).

With fasting and a diet of very modest caloric intake, Ghino managed to cure, or at least relieve, the abbot's symptoms, which probably indicated recent-onset dyspepsia caused in all likelihood by the ecclesiastic's irregular eating habits or stressful life (6). It is noteworthy that fasting would continue to be prescribed for generations, as well as wine-therapy, whose introduction dates back to the dawn of civilization.



Figure 1. Ghino di Tacco, having cured the abbot, kneels before Pope Boniface VIII. Paris, BnF, ms Français 239, f. 268v, miniature.

Despite its fictional nature, Boccaccio's novella both reveals conflicting opinions between two schools of thought within academic medicine (or even a contrast between academic medicine and empirical medicine) and opens a window onto the history and burden of dyspepsia and coeval therapeutical approaches to a gastrointestinal problem that is still a global diagnostic and management problem for physicians today.

Conflict of Interest: Each author declares that he or she has no commercial associations (e.g. consultancies, stock ownership, equity interest, patent/licensing arrangement etc.) that might pose a conflict of interest in connection with the submitted article.

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Received: 23 July 2023

Accepted: 23 August 2023

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