Temporomandibular Joint Encyclopedia Article

Temporomandibular Joint

The following sections of this BookRags Literature Study Guide is offprint from Gale's For Students Series: Presenting Analysis, Context, and Criticism on Commonly Studied Works: Introduction, Author Biography, Plot Summary, Characters, Themes, Style, Historical Context, Critical Overview, Criticism and Critical Essays, Media Adaptations, Topics for Further Study, Compare & Contrast, What Do I Read Next?, For Further Study, and Sources.

(c)1998-2002; (c)2002 by Gale. Gale is an imprint of The Gale Group, Inc., a division of Thomson Learning, Inc. Gale and Design and Thomson Learning are trademarks used herein under license.

The following sections, if they exist, are offprint from Beacham's Encyclopedia of Popular Fiction: "Social Concerns", "Thematic Overview", "Techniques", "Literary Precedents", "Key Questions", "Related Titles", "Adaptations", "Related Web Sites". (c)1994-2005, by Walton Beacham.

The following sections, if they exist, are offprint from Beacham's Guide to Literature for Young Adults: "About the Author", "Overview", "Setting", "Literary Qualities", "Social Sensitivity", "Topics for Discussion", "Ideas for Reports and Papers". (c)1994-2005, by Walton Beacham.

All other sections in this Literature Study Guide are owned and copyrighted by BookRags, Inc.

Contents

Temporomandibular Joint Encyclopedia Article.....1

Contents.....2

Temporomandibular Joint.....3

Temporomandibular Joint

One of the most multifunctional articulations in the body is the temporomandibular joint (TMJ). It is the point of connection between the jaw and the **cranium**. The large mandibular condyle on top of the ascending ramus of the mandible fits neatly into the mandibular fossa of the temporal bone. Both the fossa and condyle are large and covered with a serous membrane for easy movement. The synovial membrane of both elements allows for gliding and hingelike movements. The jaw can be both depressed (moved down) opening the mouth and rotated from side to side. This type of movement allows for chewing of food and is not seen in most vertebrates. For example, crocodiles have only an up and down movement of the jaw. Their temporomandibular joint is much more restricted than those in humans.

This high degree of motion is accomplished by the size of the fossa and condyle in addition to some important ligaments. The synovial cavity of the TMJ has both superior and inferior chambers that are covered by the articular disc. The temporomandibular ligament lies deep or under the parotid salivary gland on the lateral side. Its function is to keep the jaw from moving from side to side. This ligament is especially helpful in preventing the jaw, when receiving a hard blow, from pushing upwards into the **skull**. The companion ligament on the medial side is the sphenomandibular ligament. It extends from the sphenoid bone to the ramus of the mandible.

Two additional ligaments are not considered part of the TMJ, but are nonetheless important. The stylomandibular ligament connects the styloid process to the inferior ramus of the mandible. It prevents too much extension of the jaw. Covering the articular capsule itself is the capsular ligament. This **tissue** keeps the joint from popping out to the external side.