The Sneeze—Blissful or Baneful?

Why did benevolent wishes like "Bless you" or "Gesundheit" attach themselves inseparably to the sneeze? No routine comment is invited by someone belching, coughing, groaning, hiccuping, retching, snoring, vomiting, wheezing, or breaking wind, even when these symptoms may portend trouble. A reflex surviving all of the ancient omens and firmly established in folklore demands an explanation.

Centuries of such popular usage would make it appear that the solicitous expressions may have been generated so as to ward off an ominous threat. Moreover, lodged in the sneeze is a protective reflex—the automatic closing of the eyes. Even the cough, most closely allied physiologically,' can be accomplished with the eyes open. (In common with the cough, however, the sneeze can spread disease.) These observations suggest a danger inherent in the sneeze.

The sneeze has different meanings in different cultures.' Romans, following Persian demonology, responded to the sneeze with Absit omen! ("Evil spirit be gone!") In 619, a pestilence broke out in Italy wherein a victim who sneezed a few times would suddenly die, so that when one would begin to sneeze, Pope (later Saint) Gregory VII enjoined his people to say "May God bless you." A children's nursery rhyme emerged in reference to the plague in the Middle Ages:

Ring around the rosy [referring to the ring rash], Pocket full of posy, Achew! Achew! All fall down [dropping dead].

Jewish mothers, on hearing a child sneeze, would hastily make the incantation zum gesund ("to health") and pull up on the child's ear, thereby averting an unknown catastrophe. Should the child sneeze again, the other ear would be pulled accompanied by another blessing zum wachsen un kwelln ("to grow and thrive").

Among Jewish people, there is another interpretation of the sneeze. If someone should be relating a tale of dubious authenticity, a providential sneeze by anyone would immediately stamp it as truthful and greatly relieve the narrator. A 180° twist to this is given by the Hungarian composer Zoltan Kodály (1882-1967) in The Hary János Suite, which opens with a huge orchestral sneeze. This represents "the mocking fanfare to Hary's recountings of

his vainglorious and improbable exploits as a young Hussar." A native practicing couvade leaves his bed to pay his respects to a visiting official who offers him a pinch of Spanish snuff. This is refused for fear that a sneeze would endanger the child.'

Indeed, such a sense is provided in a Talmudic tale by a member of a group of mystical and theosophical thinkers among the teachers of the Mishna, a system of Jewish law, around the turn of the first century. Eliezer ben Hyrkanus, the brightest pupil of Rabbi Johanan ben Zakai, in describing the fourth of the seven wonders since creation, asserts the following:

No person ever became ill. Should he have sneezed while on the road or in the marketplace his soul would have issued from his nostrils, until father Jacob appealed for compassion, pleading: Master of the Universe, do not take my life until I can instruct my son and son's son. And his request was granted. . . . Therefore it is incumbent upon hearing a person sneeze to say "Life."

Also in English, derived from the Latin *exspirare*, the word *expire* is used for expressing or emitting air through the lungs, mouth, or nostrils and for dying.⁸

A dramatic enactment, lending support to this striking Talmudic tale, is in the form of a tape in my possession. An 81-year-old widow was recovering from an episode of hypertensive cardiovascular disease. She was sitting in bed at her daughter's home as a conversation with her was being taped. Suddenly, she sneezed two times in succession and fell back in bed. The daughter is heard remarking that mother must be tired. Some commotion ensued, the taping was terminated, and I was called and found the mother's senses obtunded from a stroke, with left-sided hemiparesis due to thrombosis. Supportive and symptomatic care was given at the hospital, including 12 visits to the hyperbaric chamber, and in a month she died. On the same day, a 65-year-old woman, whom I attended at a home for the aged, was documented to have suffered a stroke immediately after sneezing. Another patient whom I attended was a 68-year-old man who, while sitting in a wheelchair, sneezed and fell to one side in a coma. He died

We welcome contributions to A PIECE OF MY MIND from readers. Submissions should be addressed to Lawrence D. Grouse, MD, PhD, The Journal of the American Medical Association, 535 N Dearborn St, Chicago, IL 60610.

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on the sixth day from a basilar artery occlusion. Three years before he had undergone a ventricular-atrial shunt for a low- to normal-pressure hydrocephalus.

An unexpected source of the benevolence of this reflex is found in Job: "From his sneezing there beameth forth a light." Moreover, the prophet Elisha, by prayer and maneuvers very much akin to mouth-to-mouth resuscitation, revives the dead son of the Shunamite woman, which is marked by seven sneezes and opening of the eyes. 10

In tragic contrast is the plight of a 64-year-old truck driver who was mowing his lawn when he sneezed and suddenly went totally blind. Arteriograms taken at the hospital showed obstruction of the vertebral arteries. Fifteen months later (Aug 12, 1975), he was admitted to another hospital where he received urokinase and hyperbaric chamber treatments, with questionable improvement in light perception.

Anecdotal stories abound of events associated with sneezing. The preceding instances are designated as "sneeze thrombus"; another type is the "razor thrombus" occurring during shaving. That sexual excitement can arouse sneezing has been written about since Hippocrates, and indeed the engorgement of the nasal mucosa has been likened to penile tumescence by Mackenzie in 1844.

Sneezing, or the sternonutatory reflex, can be provoked by stimulation of the temporal lobe at surgery, by temporal lobe seizures, and by narcotic withdrawal. The sneeze can result in epistaxis and fractures of the thyroid cartilage, nose, sinuses, and middle ear. It increases the pain of a rib fracture, pleurisy, intra-abdominal inflammation, and vertebral disk disease and aggravates hernias, hemorrhoids, excretory incontinence, and prolapse of rectum or uterus. Smothering a sneeze may result in a stroke,^{1,11} but if one wants to sneeze and cannot, the photic sneeze may bring gratifying relief.¹

With the pervasiveness of the sneeze, why, then, is there scant mention of it in the literature of stroke? How did it manage to make itself so unobtrusive as to escape medical scrutiny? Perhaps it is due to the innocence of the sneeze in its usual association with allergy or the "cold." In the event of a cerebral insult, it leaves the victim in an amnestic and obtunded state, if he is lucky enough to survive. Relatives may not be present, and even if present the more important drama of the evolution of the stroke overshadows the commonplace symptom of a sneeze.

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The following provided aid in the research for this article: Neil Allen, MD; Bruce Golden, MD; Paolo Cherchi, PhD; and Rabbi Ben Zion Rand.

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No One Wants Girls Except . . .

The other day I was shopping for a humorous greeting card to congratulate a friend on the birth of her daughter. I was struck by the fact that the card shop displayed six different cards for baby boys and only two for baby girls. This was a reminder of a long-nagging suspicion that American parents prefer boys over girls. A quick trip to the public library for some research seemed to confirm these thoughts.¹²

So many times in my private practice of pediatrics, I have seen disappointment in the faces of fathers and mothers when girls were born. One time I found a mother crying over the birth of her second healthy daughter. She told me that she and her husband wanted a boy and that she wasn't sure she could love this baby. I told her, half seriously, that I would adopt and love the baby. The next day she seemed better adjusted.

Even though many people claim that all they want is a healthy baby, I have found from conversations that most hoped for a healthy boy. I asked two colleagues whose wives are pregnant for the first time which they preferred. Both said boys. One did say, however, that a friend of his has a baby girl and seems very happy with

her. I have observed in my practice that when a boy followed two girls, the parents were ecstatic. Yet when a girl followed two boys, the parents would be just happy.

There are exceptions of course. My parents were very happy. They had two daughters; they were both concentration camp survivors with very few of their own relatives left. After living through such tragic events, the birth of any healthy baby would have brought joy to them. Parents who have lost children to illness or accidents, I have observed, generally do not have a preference for the subsequent children's gender. Also included in this group are people who have had difficulty producing a child. Hopefully, with some consciousness raising, there will be more people who would gladly welcome female children.

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