

Anaphylaxis to chicken soup: A case report and a brief history of the chicken in medicine

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Chicken soup has been considered a panacea of medical ills for ages. Mothers throughout the centuries have extolled its virtues. As early as the twelfth century, the physician and philosopher, Moses Maimonides, praised its therapeutic efficacy.¹

In contrast, adverse reactions to chicken soup have not been widely reported. A recent local poll of mothers revealed only beneficial effects when chicken soup was used by mouth as a remedy for a variety of viral illnesses (Saff R. Personal survey). An informal review of recently published state-of-the-art cookbook literature revealed no adverse reactions to the preparation (Saff R. Personal survey).

However, a treatment failure for chicken soup (Bohymycetin) therapy has been reported.¹ In that case, pneumonia failed to resolve after initiation of chicken soup as therapy, although the course of soup was considered to be probably subtherapeutic. In addition, other cultures may be more aware of adverse reactions to chicken and its products. A tribe in Southeast Asia, the Sema Naga, imposes taboos on the kinds of chicken women can eat. They cannot eat chicken that "lay here and there in different places" for fear that the women will be promiscuous.²

The following case report presents a serious allergic reaction after ingestion of the medicament.

CASE REPORT

An 18-year-old man with a long history of seasonal allergic rhinitis left school one day early in spring 1991 with a complaint of a periorbital headache. He took buffered aspirin and ate a bowl of packaged chicken soup, to which hot water had been added for reconstitution. He then fell asleep but was shortly awakened with chest pain, dyspnea, and facial edema. He had no previous history of cardiac disease, he was not known to be "chickenhearted," and he had previously taken aspirin without an adverse reaction. He sought medical attention at the nearest emergency room in which he was treated with epinephrine, diphenhydramine,

and methylprednisolone. His mother further resisted her instinct to assist in the resuscitative attempt with homemade chicken soup. He was not admitted to the CCU (Chicken Care Unit), recovered completely, and was discharged asymptomatic.

Subsequent tests in the Allergy Clinic of the Medical College of Wisconsin revealed a marked immediate wheal-and-flare skin reaction to the previously ingested packaged chicken soup mix. Skin tests on three asymptomatic control subjects with this preparation were negative. Moderate wheal-and-flare skin reactions could also be demonstrated to peanut, parsley, carrot, celery, cucumber, and grapefruit, but not to chicken. He was also reactive to common aeroallergens. Challenge testing with chicken soup was considered but not done for fear of precipitating an episode of anaphylaxis. Continued avoidance of chicken and chicken soup as food or medicament has resulted in no additional episodes of anaphylaxis. Clear fluids of nonanimal origin and acetaminophen have been used for therapy for subsequent viral illnesses.

DISCUSSION

Mankind's backyard friend has been the chicken, *Gallus domesticus*. Some regard the chicken as a fascinating totality, an integral part of that ordered world in which man and chicken flourish side by side. Indeed, chicken divination has survived among Thai tribes. For them, the cock is a sacred bird, a messenger of the gods, and it is for these reasons, as well as his value as a clock, rather than food, that chicken are nurtured by these tribes.²

Chicken has been used since antiquity for therapeutic purposes. The Greek physician, Galen, fostered a remedy for the chronic bed wetter with a gizzard of the cock and a dram of juniper juice, dry acorn, a flower of a wild pomegranate, and oak apple crushed together with rose and honey and administered by mouth.²

Averroes, the Spanish-Arabic philosopher, prescribed the broth "of a young fat hen" as "the best medicine for leprosy." Marcellus Empiricus of Bordeaux wrote that "chicken fat melted and dropped in the ear while warm can heal whatsoever disease of the ears."²

The anecdotal story is told of a poor farmer with only two chickens. One chicken became ill; therefore,

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the farmer killed the healthy chicken to make chicken soup for the sick chicken. A cure resulted.

Side effects of chicken soup are usually minimal, primarily mild euphoria, which rapidly remits when the agent is stopped.¹

Further therapy for chicken soup anaphylaxis is an intriguing issue. Desensitization protocols have not been formulated but could be established along the lines of penicillin or insulin desensitization.³ It is uncertain whether the oral or intravenous route would be more effective for such therapy.

We suggested that the current patient avoid chicken soup and parsley products, since parsley is a common ingredient to soup, and we could not be certain of the role of other ingredients, such as condiments in his anaphylactic response. We advised that he heed the words of Thomas Fuller who, in 1732, said, "If you would have a hen lay, you must bear with her cackling."²

Immunologic cross-reactivity between penicillin and cephalosporin has been well documented.⁴ One wonders if there is a cross-reactivity between chicken soup and other ethnic foods, such as lox, pastrami, and knishes. This remains an area for further investigation, which could be carried out at the local deli.

REFERENCES

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Correction

There is an error in the article by Silton et al. published in October 1991, vol. 88, No. 4, pages 595-603. Legend for Fig. 4, page 600, is the legend for Fig. 3. Legend for Fig. 3, page 600, is the legend for Fig. 4.