ACTIVATED CHARCOAL

Treatment of Wounds, Ulcers, and Bruises

Lancet, the prestigious British medical journal, describes the use of charcoal compresses to speed the healing of wounds and eliminate their odors. This article tells about the amazing ability of human skin to allow transfer through its permeable membrane and pores of liquids, gasses and even micro-particles by the application of moist activated charcoal compresses and poultices which actually draw bacteria and poisons through the skin and into the poultice or compress. Poultices must be kept moist and warm to allow this healing process to take

Make a poultice by putting 1-2 tablespoons of charcoal powder in a container and adding just enough water to make a paste. Spread the paste on a paper towel, cloth, or piece of gauze cut to fit the area to be treated. Make sure the cloth is moist, warm, and thoroughly saturated with the paste. Place it over the wound cloth-side down and cover it with a piece of plastic wrap or plastic bag cut to overlap the poultice by an inch on every side. Fix in place with adhesive tape. Poultices should be changed every 6-10 hours. Do not put charcoal directly on broken

skin, as it may cause a tatooing effect (21, 23, 24, 29, 38, 50).

Poisonings

Activated charcoal can be used as an antidote in poisoning from most drugs and chemicals. DO NOT USE WITH THE FOLLOWING: cyanide, mineral acids, caustic alkalies, alcohol, or boric acid. Other antidotes are more effective. Consult a Poison Control Center or a doctor immediately for instructions and information in any poisoning emergency (10, 51, 52).

In poisonings, activated charcoal works by adsorbing the poison or drug, inactivating it, and carrying it inert throughout the digestive system so that it can be eliminated from the body. Charcoal is neither adsorbed nor metabolized by the body (6, 13, 47, 53).

In a poisoning emergency, if the patient is conscious, first induce vomiting if it can be done quickly. Syrup is ipecac is a commonly used emetic preparation. The dosage is ½ oz. for children and 1 oz. for adults. Induced vomiting will bring up about 30% of the poison from the person's stomach. Then give charcoal to help inactivate the remaining 70%. The usual dose of charcoal is 5 to 50 grams, depending on the amount of poison taken and the person's body size. Adults should recieve at least 30 grams, or about half a cup of lightly packed powder. Larger doses are needed if the person has eaten a meal recently. A dose of 200 grams is not excessive in severe poisoning cases. Powdered charcoal can be given in fruit juice, chocolate syrup, jam, or honey to make it easier to get down. Ice cream is not recommended as it makes the charcoal less effective. Powdered charcoal reaches its maximum rate of adsorption rapidly, within one minute. The sooner it is given the better the chances of successful treatment. The dose can be repeated every four hours, or until charcoal appears in the stool (3, 10, 41, 47, 48,

Do not give charcoal or anything else to an unconscious patient. Consult a doctor at once. Do not give charcoal before giving an emetic, because the charcoal will adsorb the emetic and make it ineffective. Charcoal does not work in every poisoning situation, so be sure to follow

your doctor's instructions.

CONCLUSIONS

Activated charcoal taken as a powder is the most effective form of charcoal that can be used. The best method of use is to take the required spoonfuls of powder, place them in the bottom of a cup or glass, and add water while rapidly stirring the charcoal into the water, then drink it down, along with a second glass of water to include any residue. Alternate methods listed below can also be used.

You can put charcoal into empty gelatin capsules. They may act more slowly than powder; the capsule must dissolve before the charcoal can work. Vegetarians who object to gelatin can use starch papers called Kokko-Oblates to allow convenient ingestion of activated charcoal

powder. These are obtained at health food stores.

Although medical researchers have not yet discovered why charcoal is so effective both chemically and physically, activated charcoal remains the choice of the medical profession as an antidote (10, 38, 41). It is inexpensive, harmless, and easy to use.

Millard & Wilson Brand Activated Charcoal is a pure charcoal powder that is only sold in lined and sealed metal cans to insure its freshness and purity. Ask for Millard & Wilson Brand Activated Charcoal, distributed in the U.S.A. by: **Charles Wilson** 100

BIBILOGRAPHY

- British Medical Journal, August 26, 1972
- Cooney, David O. Activated Charcoal, New York: Marcel Dekker, Inc. 1980, p.
- Acta Pharmacologica et Toxicologica
- Journal of the American Medical Association 64:1882, May 29, 1915.
- Cooney, David O. Activated Charcoal, New York: Marcel Dekker, Inc. 1980, p.
- Journal of the American Medical Associaton 210(10):1846, December 8,
- Bulletin de la Society de Chime Biologique 27:513-518, October-December, 1945
- Journal of Animal Science 34:322-325, February, 1972
- Cooney, David O. Activated Charcoal. New York: Marcel Dekker, Inc. 1980 p.
- Clinical Toxicology 3(1):1-4, March, 10. 1970
- Annals of Emergency Medicine 9:11, November, 1980
- AMA Archives of Industrial Health 18:511-520, December, 1958
- Archives of Environmental Health 1:512. December, 1960

- 14. Journal of the American Medical Association 240(7):684, August 18, 1978
- Comptes rendus Hebdomadaires des Seance de 1-Academie des Sciences 187:959-961, November 19, 1928
- Toxicology and Applied Pharmacology 26:103-108, September, 1973
- Journal of the American Medical Association 209(12):1821, September 22, 1969
- Management of Poisoning, Pediatrics for the Clinician, p. 325
- Journal of the American Medical Association, June 15, 1984, 3104 & 3130
- Patient Care, October 30, 1977, p. 152
- Eye, Ear, Nose and Throat Monthly 47:652-655, December, 1968
- Journal of the American Geriatrics Society 12:500-502, May, 1964
- 23. Journal of the American Medical Association 64:1671, 1915
- 24. Chirurg 19:191, April, 1948
- Quarterly Journal of Pharmacology 1:334-337, July-September, 1928
- Cooney, David O. Activated Charcoal, New York: Marcel Dekker, Inc. 1980, p.
- 27. Ibid, p. 131
- 28. Ibid, p. 133

- 29. White, Ellen G. Selected Messages, Volume Two, Washington, D.C. Review and Herald Publishing Association, 1958 p. 294
- Nature 184(Suppl 15): 1165-6. October 10, 1959
- Medical World News. February 17, 1967
- Cooney, David O. Activated Charcoal, New York: Marcel Dekker, Inc. 1980
- The Lancet 1:1301, 1974
- Annals of Internal Medicine
- 93:446-449, 1980 British Medical Journal 2:1465, November 25, 1978
- Medical Tribune, April 12, 1978, p. 2 Surgery, Gynecology, and Obstetrics
- 96:873-878, 1930 Home Remedies, A. Thrash, M.D. & C. Thrash, M.D., 1981
- Common Poisons & Injurious Plants, U.S. Public Health, FDA 1981-7006
- Handbook of Common Poisonings In Children, U.S. Public Health, 1976-7004 41. Pediatrics, Vol. 54, No. 3, Sept. 1974,
- Drs. Corby & Decker 42. Am. J. Hospital Pharmacy, Sept. 76
- pp. 965 Am. J. Hospital Pharmacy, June 79
- Am. J. Hospital Pharmacy, Aug. 79
- 45. Clinical Toxicology, May 75
- 47. Hospital Formulary, 1983

- 48. Martingale Extra Pharmacopeia, 28th edition, pp. 72, 1982
- AMA Drug Evalutions 5th Edition, 1983
- Wildwood San. & Hospital, Wildwood, Ga. Marjorie Baldwin, M.D.
- Conn's Current Therapy 1984, pp. 925 & 927
- Merck Manual 14th Edition
- American Society of Hospital Pharmacists, 1976
- Facts & Comparisons, 1981
- Klin Wochenschr, 1982
- Our Earth, Our Cure, R. Dextreit, 1974. Swann House Publishing Co., Brooklyn, N.Y.
- Effect of orally administered activated charcoal on Intestional Gas. Hall, Thompson & Strother. Loma Linda Medical School, 1981
- Prevention, Feb. 1981, pp. 136
- Lancet, Sept 13, 1980
- American Medical News, pp. 37, June 60. 22, 1984
- European Journal of Pharmacology 24: 557, 1983
- The Pediatric Clinics of N.A., Vol. 17, No. 3, Aug. 1970
- Hospital Pharmacy News, pp. 6, May 1984
- Journal of Pediatrics, Holt & Holz, pp.
- British Medical Journal, pp. 51, Oct. 7,