KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT

From the Division of: Health

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Kansas Morbidity Incidence

IN COOPERATION WITH THE BUREAU OF EPIDEMIOLOGY

Published: Monthly (0453-2252) Summary of Cases Reported in August, 1982

Disease	August			January - August (Inclusive)		
	1982	1981	5-Year Median 1977-1981	1982	1981	5-Year Median 1977-1981
Amebiasis	-	3	3	13	15	13
Aseptic meningitis	11	12	12	38	36	36
Brucellosis	-	-	-	3	3	3
Diphtheria	-	-	-	-	-	-
Encephalitis, prim., infect	-	2	2	2	6	6
Encephalitis, post-infect	-	-	-	1	-	3
Gonorrhea	626	726	937	5,614	5,596	5,745
Hepatitis A	14	*	*	156	*	*
Hepatitis B	13	*	*	63	*	*
Hepatitis Non-A, Non-B	1	*	*	12	*	*
Hepatitis, Unspecified	1	*	*	7	*	*
Measles (Rubeola)	-	-	1	32	1	67
Meningococcal meningitis	2	-	-	16	13	9
Mumps	-	-	2	93	95	203
Pertussis	2	-	1	9	5	8
Poliomyelitis	-	-	-	-	-	-
Rheumatic fever	1	-	-	3	6	19
Rubella (German Measles)	-	-	2	12	62	110
Salmonellosis	49	35	37	264	287	231
Scarlet fever	-	-	1	594	520	385
Shigellosis	10	10	10	86	68	127
Streptococcal infections	-	-	128	7,383	5,403	7,203
Syphilis	29	22	60	261	267	393
Tinea capitis	-	-	1	230	191	173
Tuberculosis	9	13	11	69	90	75
Tularemia	-	1	-	1	1	-
Typhoid fever	-	-	-	1	2	1

*Not available

WHY REMOVE NITS

Kansas Administrative Regulation (K.A.R.) 28-1-6, which became effective May 1, 1982, requires that students who are infected with head lice (pediculosis) be excluded from school until they have been treated with an adequate pediculocide and have removed all nits. The reason for use of a pediculocide is,

OVER

Pediculosis

of course, obvious; justification for requiring removal of nits is less obvious but is believed to be equally important. Nit removal must be considered integral to the treatment of pediculosis because:

(1) The pediculocides, including Kwell, Rid, A-200, and Triple X, are not effectively ovicidal. Prioderm, newly introduced to the American market (active ingredient--malathion) shows more ovicidal promise, but none of these products, despite their manufacturer's claims, have been shown to effectively penetrate the egg (nit) case and destroy the developing nymph form.

(2) Retreatment with pediculocide is routinely recommended one week after initial treatment. The purpose of this retreatment is to destroy any lice which survived the initial treatment as nits and have recently emerged. (Viable nits hatch within one week.) But it is not justifiable to exclude students for this one week interval, awaiting retreatment.

(3) Although it is possible to determine whether a nit is viable--by position on hairshaft, by degree of opacity, and by determining if the operculum is open--experience has shown that schools need more fundamental means of discernment. This is particularly true during outbreaks with attack rates of 30 percent or higher, in which teachers and administrators must determine adequacy of treatment.

(4) There is no reason not to remove nits. They serve no useful purpose, and make only negative contributions to one's self and social acceptability.

Nit removal is admittedly an onerous task. The pediculocides, whether shampoo or lotion, do not dissolve the mucin secreted by the female louse, securing the nit to the hair shaft. This mucin is a protein substance similar in structure to hair. Products which could dissolve it would be equally damaging to the hair. Therefore, nits must be removed mechanically. Good light, a fine-toothed comb, and patience are required. Some authorities suggest that rinsing the hair with a vinegar solution will help loosen the nits. The proportions of the solution are not believed to be critical. Whether using a vinegar rinse or not, it is important to keep the hair damp while combing out nits. A common mistake is to attempt to comb nits from dry hair. This can be very unrewarding. The technique involves selecting a one-inch strand of hair, and while holding it away from the head with one hand, combing repeatedly with the other hand. When this strand is cleaned, select another one inch strand to comb, repeating the process until the task is completed. An effective comb for this purpose is the Medi-Comb, available from Nitrex Laboratories, Inc., 52 Church St., Boston, MA 02116. Other combs may be equally effective--this is one which has been successfully used by this Department.

It is ironic that head lice, which are of little medical significance, can cause great consternation. But it is a fact that parents overreact, spend hundreds of dollars on pediculocides and other insecticides, retreat children unnecessarily when only nit removal is needed, and demand that schools be closed. One hour with a nit comb can make a great difference in dealing with the pediculosis situation.

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10 MINUTES. KWELL lable now states the drug should be left on for only four minutes. There are several good alternative shampoos to KWELL. All available data indicates they are just as good. Most of these shampoos contain pyrethrum with a synergist

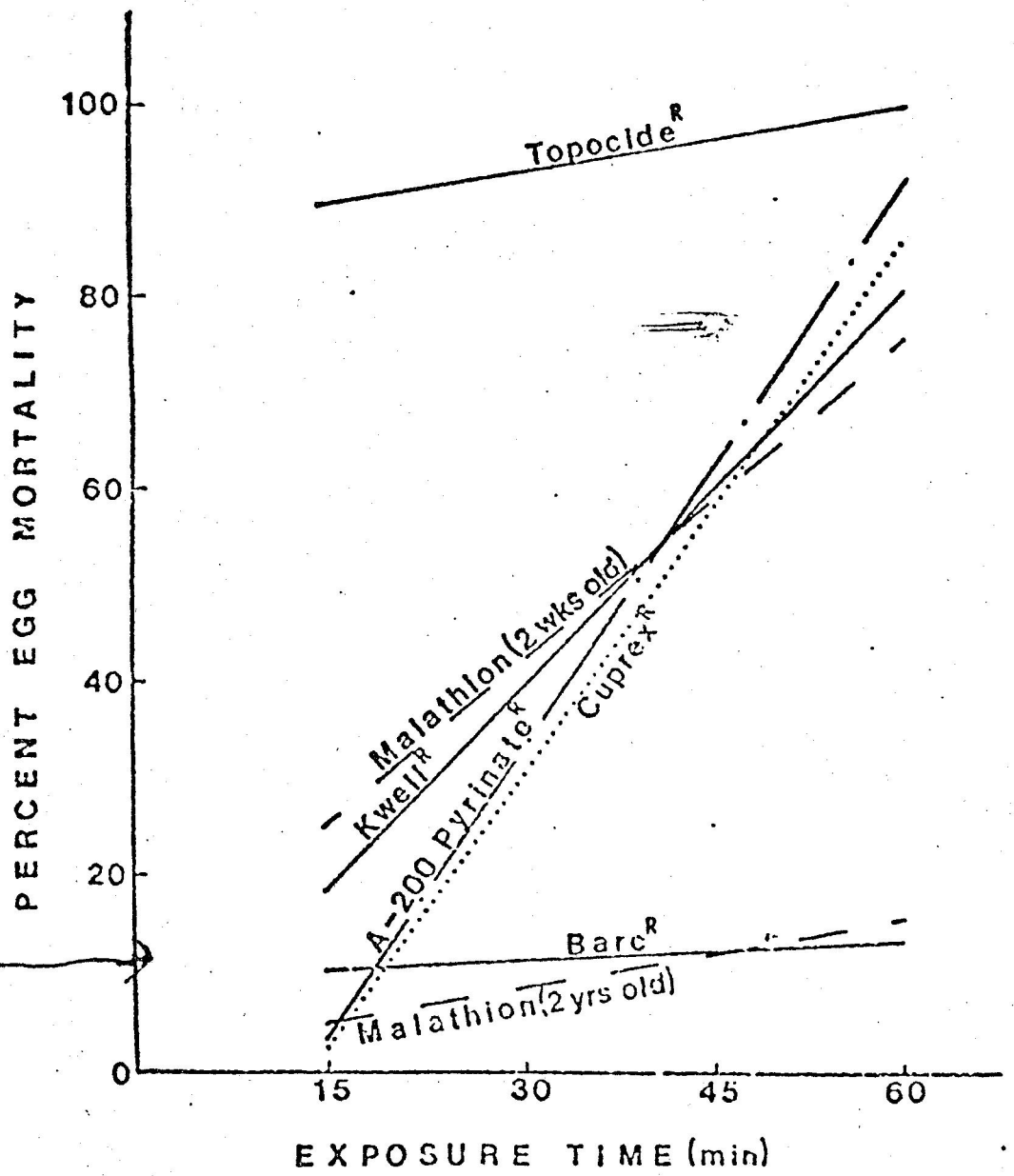

Fig. 20. Mean percent mortality of eggs of the head louse, Pediculus humanus capitis, exposed to pediculicides for various periods.

"Pediculicides and scabicides have not proved to be ovicidal when used according to the manufacturer's directions. Therefore, it is generally recommended that infested patients be treated twice. The interval between treatments should approximate the incubation period for louse or mite eggs (1 week) so that any newly hatched parasites will be killed by the second application." (taken from: The Handbook of Drug Therapy, 1979, "Pediculicides and Scabicides", Dennis D. Juranek.