Round Table Discussion

PEDIATRIC DERMATOLOGY

EARL D. OSBORNE, M.D., Buffalo, N.Y., Chairman; JOHN R. ROSS, M.D., Toronto;
NORMAN M. WRONG, M.D., Toronto
WALTER C. MCKEE, M.D., Chicago; GEORGE S. FRAUENBERGER, M.D.,
Evanston, Ill., Secretaries

Chairman Osborne: The material which we will cover will be material which must be spoken
about in terms of groups of people, types of individuals and different classifications of diagnosis.
We will lose a great deal of the effect of what we have to discuss if we get off on a small subject
connected with an individual case, so I hope we can refrain from citing specific cases. You all
recognize that we can't make progress if any of us are going to present specific individual problems
on a specific case.

Fortunately we have some disagreement among members of the panel for where everyone agrees
there is a lack of interest, especially in the field of cutaneous diseases, and particularly in the
eczematous diseases. If we seem to disagree it is because the material calls for disagreement and the
literature backs us up on that disagreement.

We are going to start with the general phase of the subject: the care of the skin of the newborn.
I am going to ask Dr. Norman Ross to discuss the care of the skin of the newborn from the stand-
point of the pediatrician.

Dr. Ross: In these newborn infants overzealous cleaning of the baby and too much anxiety on
the part of the nurse following birth is apt to do far more harm than good. The baby when born
has a membranous covering that should not be too thoroughly and vigorously removed. Soap is not
advisable. Plain water will remove sufficient of it and, in fact, delay of thorough bathing of the
infant for a few days would probably be advisable. As to applying any antibacterial preparation to
the skin—this can be done if you are finding there are a number of cases of infection in the hos-
pital at that time. But even at this we don't use it often and it probably is not advisable.

Chairman Osborne: Dr. Wrong, would you please discuss this from the viewpoint of the derma-
tologist and include in that what is known from a bacteriologic standpoint regarding the presence
of pathogenic organisms on the skin of newborn and young infants.

Dr. Wrong: I feel very definitely that this is something that concerns the pediatrician much more
than the dermatologist. After all, it is the care of the normal skin and the pediatrician, the ob-
stetrician or the general practitioner is the man who sees the child within the first few days, weeks
or months of life. The dermatologist only sees that child when it develops something abnormal
with the skin, so that I feel that the question of care is one which pediatricians can discuss much
better than dermatologists. As far as the bacteriology is concerned Dr. Osborne suggested that I look
this up and I was amazed how little there is in the literature, that is, on the subject of the bac-
teriology of the skin of the newborn.

The bacteriologist in the hospital looked it up also and neither of us could find much. Dr.
Osborne told me that they had found that up to 4 or 5 days the skin of the newborn infant is
remarkably sterile and that the organisms begin to appear after that.

Chairman Osborne: I want to add a word along this line. Most of us know that at least in the
private hospital the obstetricians control the first few days or weeks of life of many infants. In
other institutions the infants are turned over to pediatricians. This is especially true in the free
institutions. There are a number of institutions that have instituted a new regime of leaving the
vernix on for a period of from 2 to 5 days, then gently removing this material with lukewarm
water and no use of soap whatever. For a period of at least the hospital stay and for 3 or 4 weeks

Presented at the Annual Meeting of the American A:academy of Pediatrics, Toronto, Oct. 23 and
24, 1951.
at home no soap should touch the baby's skin. When soap is used later it should be a superfatted soap.

However, we must remember that any soap by definition is an alkali. No soap, no matter how good, has a pH of less than 9. Alkali has a marked effect on a newborn baby's skin where the horny layer is exceedingly thin. The epidermal cells are exposed to the action of alkali and alkali is of and by itself a sensitizer. Many skins become hypersensitive later to any alkali. They become particularly sensitive to the O-H group and for that reason alkali should not be used on young skin. When soap is used it should be superfatted soap and then the child should be bathed not more than 3 times a week. If a further bathing is necessary, the groin, the thighs, the feet, etc., those parts can be rinsed off with plain water or oatmeal water or starch water of any kind without the use of soap. We want to emphasize that the use of soap in the early weeks of life should be stopped.

I would like to ask Dr. Wrong to discuss the use of oils applied to the surface of the newborn skin during the first few weeks of life.

Dr. Wrong: I think that oils coat the skin and seal off the glands in that way. If there are organisms in the area there is more tendency for them to invade the oil and sweat glands. Oils which contain perfume and various antiseptics may act as a sensitizer and produce an eruption. The tendency in the past, maybe due to overzealous advertising, has been to overdo the use of skin oils and we have all been led to believe (if we read the ads) that no harm can come from applying baby oil. I think quite a bit of harm can come from baby oils. As Dr. Osborne has said, the baby's skin is better if it is cleaned with plain water and if soap is used sparingly; certainly the skin should not be covered with grease or oil which may contain some perfume or substance which will in itself be a sensitizer.

Chairman Osborne: It is true, also, Dr. Wrong, that some oils, with no preservative added, will in themselves leave a fertile medium for the growth of bacteria.

Dr. Wrong: We have been told that some of them are excellent culture mediums.

Chairman Osborne: Dr. Ross, what do you think of the action of oils and greases on the young infant's skin in precipitating miliaria?

Dr. Ross: I certainly believe that a lot of these infants tend to show miliaria more readily if their skin is oiled or greased. Their skin should be dry and the pores should be open in order to counteract the excess heat that the mother exposes them to through overdressing.

Chairman Osborne: Your problem of excess heat brings up an interesting point: I think the average baby that I see in my office has about 5 times too many clothes on. Particularly the first baby who comes in accompanied by the mother and father. They unwrap about 4 layers of blankets, then the child is in another layer of woolen. The child is sweating profusely and may or may not have an eruption.

I would absolutely forbid the use of any oil, simple oil, olive oil or any of the patented makes in the scalp.

One important phase in the care of the newborn in my experience is this; in hospitals, especially, and in many private homes, newborn babies are, as Dr. Wrong pointed out, exposed to excessive heat. I am often called in as a consultant where the pediatrician has made a diagnosis of impetigo involving the groin with the formation of clear vesicles and seldom see any pustules until later.

The thing I want to point out is that it is a miliaria. It is not impetigo and is not due to any faulty care of the child in the hospital. There have been a lot of law suits over the presumed faulty care of the newborn infant in the hospital nurseries. It is almost always a miliaria if, when organisms become present, a pustular eruption can be produced which takes weeks and weeks to clear after it is once developed.

The next subject we want to take up is the prophylaxis of impetigo contagiosa. This has been a live topic for quite a number of years—less so at the present time, fortunately. We recognize that all sorts of antiseptic preparations have been used in years gone by. Ammoniated mercury was one of the first. In various strengths—3% ammoniated mercury seemed to be optimal, although 5% was used in some. Then sulfa drugs were used as prophylaxis against impetigo. Then penicillin ointment and now more recently other preparations have been used as prophylactic agents against impetigo contagiosa. I would like to state now that, in our opinion, the best prophylactic agent which is harmless and does not sensitize, is a water solution of either aureomycin or neomycin. You may put a 50 mg. tablet in anywhere from 2 up to 8 ounces of water and sponge it on. It is an excel-
lent prophylaxis if a prophylaxis must be used. Many of the hospitals find it unnecessary to use it today if the directions we have already given are followed. It isn't necessary to use prophylaxis against impetigo.

The water solution is nonsensitizing whereas the ointment forms are sensitizing.

Dr. Wrong: I am interested in what Dr. Osborne has said regarding the use of aureomycin and neomycin.

Chairman Osborne: This preparation can be used if there is impetigo in the nursery by sponging on all the infants about 3 times a day.

Dr. Wrong: We have heard a lot about lotions containing G-11 used to sponge the infants. The pH is around 7 and I am told by some of my pediatric friends who have used it in the nursery that it has seemed to cut down the incidence of impetigo. These are to be used only if the child has been or may have been exposed to infection.

Dr. Ross: A good many of my colleagues and I have used sulfa ointment and we haven't found sensitizing effects very often. I think the reason is we prescribe it for only a 4 or 5 day interval, not for a week or 2 weeks. It works remarkably rapidly and seems to clear them in 2 to 4 days at the most. I know if these ointments are kept up for a period of weeks you may get sensitizing effect.

Question: What do you mean by sensitizing—in the sense of allergy or just what?

Chairman Osborne: I mean in the sense of developing a specific hypersensitivity to aureomycin. We have not had one single case of specific hypersensitivity to water aureomycin. In many hundreds of cases this has not happened.

There are quite a number of cases in our experience of hypersensitivity to aureomycin ointment. I want to point out that in all those that have been investigated, it is believed the sensitization has been due to the base and not to aureomycin.

Dr. Albert J. Sheldon, Santa Ana, Calif.: What about the use of talcum or antiseptic talcum powder in the prophylaxis of impetigo?

Chairman Osborne: Plain talcum is not sufficient to act as a prophylaxis against impetigo contagiosa.

Dr. Sheldon: Do you have the objection to talcum that you have to oil in the routine care of the newborn?

Chairman Osborne: Not at all. Talcum does not plug the sweat pores.

I would say on the basis of my experience that aureomycin and neomycin as I have outlined are the most effective and the least sensitizing and that last is an important thing. We found in a survey of 200 cases of eczema in children under the age of one month that in 20% of them the original dermatitis or eczema was induced originally by sensitization to ammoniated mercury. This was a survey made about 15 years ago. It shows the very real point that initial sensitization in an individual constitutionally tending toward sensitization or allergy that an allergenic drug like ammoniated mercury can start the individual off on a train of allergic reactions. So I would urge the use of a nonallergenic substance like the water solution of aureomycin or neomycin and there may be newer ones coming along in the near future that will be even better.

Inasmuch as we are discussing infections of the skin we will include not only the newborn but all the other age groups of infants coming under the guidance of pediatricians. I would like to have Dr. Wrong discuss in general at this time the treatment of bacterial infections of the skin, particularly from the standpoint of evaluation of bactericidal agents.

Dr. Wrong: In the treatment of any bacterial infection of the skin and certainly if you want to be scientific at all it is essential that this be controlled by bacteriologic studies; if at all possible in your practice, do cultures. You will gain a great deal of interesting information from the skin culture—pustules, skin crusts, etc. Are you dealing chiefly with staphylococcus or streptococcus hemolyticus or with a combination of both? That is important as a start, and then in the general treatment of pyogenic infections of the skin, I think, probably today the antibiotics which we have available are the best treatment we have. Certainly in the old days of ammoniated mercury we saw nothing like the spectacular results of treatment that we see today with the antibiotics. As far as the antibiotics are concerned, I prefer to use the ones which we are not going to use by injection or orally. Bacitracin is one which has a high index against both staphylococcus and streptococcus. One in particular on which we are doing some work is neomycin. This is particularly effective...
against staphylococcus, not as effective against streptococcus, but interesting enough it is very effective against Pseudomonas aerogenes, which may be of real value.

I think we should bear that in mind as a general principal. Let us use substances on the skin which at least in the laboratory have a high killing index against bacteria and have a low sensitizing power against the skin. They are not liable to produce a dermatitis.

Chairman Osborne: Dr. Ross, would you discuss for us the use of these substances on the skin and the important time intervals from the standpoint of sensitization. Explain to the group why it is you can use sensitizing drugs for 1 or 2 days where you can't use them for 14 days or more. Also, what do you favor in the cure of skin infections?

Dr. Ross: When using sulfa ointments it takes a period of time to build up a sensitivity to that particular drug if the child seems to develop that sensitivity. It takes 10 days to 2 weeks in animal experimentation to sensitize animals and the same occurs in these infants.

Chairman Osborne: I would like to summarize what I feel about any antiseptics used on the skin for any infection—that includes impetigo contagiosa, pediculosis, the pustule element in ordinary miliaria, a spreading pustular infection around a source of injury such as an insect bite and all other skin infections. Dr. Ross has rightly pointed out that to sensitize an individual you must use a preparation about 14 days or longer. Many men, not only pediatricians, but dermatologists and general practitioners prescribe a sulfa drug or a penicillin ointment and never put any time limitation on its use. The same goes for ammoniated mercury, sulphur ointments and many other things.

If you are going to use a sulfa drug on the skin you must put on a time limit, usually 3 or 4 days. If you are going to use penicillin preparations you must put on a time limit or you are going to sensitize. Now the sensitizing index of sulfa drugs on the skin in ointment form has been found to be in a large group of cases about 30% if the drug is used on more than 2 weeks, about 20% in penicillin if used more than 2 weeks. For that reason I must disagree with my colleague, Dr. Ross. He uses the sulfa drug because he limits the time but I don't think in the view of our present antibiotics that there is any indication whatever for the use of any sulfa drug or any penicillin on the skin. They should only be used when they are life-saving in serious infections such as pneumonia or appendicitis, as long as we have the new antibiotics that can be used more easily or cheaply and without any risk of sensitization.

Dr. Wrong has pointed out that neomycin is coming on the market and is already on the market in certain parts of the United States. Men are having difficulty in getting it. It is the best antibiotic we have at the present time. Sometime ago I heard about penicillin 98. It is not yet on the market but it is still better than any of the others, so that we are in for a period of improved antibiotics that have a wide effect on bacteria and which will become increasingly important in the care of the skin in the future.

Dr. Irving Weinstock, Brooklyn: For the treatment of impetigo contagiosa, was the treatment with injection of penicillin purposely left out?

Chairman Osborne: That was purposely left out. The treatment of impetigo should consist of the liberal use of soap and water twice a day and the use of one of these antibiotics. Personally I favor aureomycin or neomycin.

Comment: In an extensive impetigo, in addition to using one of the antibiotics locally I would also give penicillin intramuscularly.

Chairman Osborne: I hadn't thought about that but I would agree with that too. Where there is any possibility of blood stream infection there is no reason why you shouldn't use penicillin by injection.

Dr. Frank E. Roth, Hartford, Conn.: Do I understand that you prefer at all times to use aqueous solutions of these antibiotics?

Chairman Osborne: That is correct as far as I am concerned. I think I am the only one of the panel who has had experience with them. You can try them and make up your own mind. I am telling you my own experience.

Dr. Wrong: I have used aqueous solutions of neomycin in external otitis and I agree with Dr. Osborne that it seemed to be of great value.

Chairman Osborne: We want to cover the subject of external otitis in some detail for you here because you get plenty of those cases in pediatric practice. Most of them result from extension of the seborrhoid process down from the scalp. Too many cases of otitis have been treated as fungus
infections. You can find the same organisms on normal skins. They are seldom pathogenic; they are staph, strep, hemolytic staph and strep. The medium present in those areas, because of the specialized oil glands, is highly favorable for the growth of certain bacteria. I would like to ask Dr. Ross to discuss the treatment for external otitis of the seborrhoic variety.

Dr. Ross: I do feel that in these cases of external otitis if one cannot visualize the ear drum, if there is a great deal of debris, considerable benefit may be derived from irrigation in cleaning up the debris to be sure you are not dealing with otitis media. Then I always take cultures and I agree with Dr. Osborne that a lot is usually found there. George Lewis of New York, among others, has proved pretty conclusively that the so-called fungi that are found in the ear are rarely pathogenic.

Locally we have been using aqueous solutions of neomycin and of bacitracin and we have also been using neomycin in ointment. It is also important in external otitis to clean up the scalp; many of these cases are associated with a great deal of dandruff and that certainly is a factor in continuation of their disease.

Chairman Osborne: I would like to discuss this subject a little longer. As Dr. Wrong intimated bacillus pyocyaneus is almost certainly the organism at fault in the prolonged chronic cases. However, you always find positive cultures of pathogenic streptococcus and streptococcus. You find the others, too, but they are unimportant. Now, how best to treat this combination of organisms? There is one remedy that has been used for a great many years but that has been forgotten by a great many physicians. That is acetic acid. Up until the use of neomycin, as Dr. Wrong pointed out, acetic acid is still the best remedy against the bacillus pyocyaneus. Many men in general practice have used vinegar in one to 4 or 5 parts of water in treatment of the external type of otitis. Now for a period of 3 years we have been using irrigations of the external auditory canal with a solution in which the active ingredient is acetic acid. You purchase an ordinary ear syringe, irrigate the external ear canal with dilute Burow's solution of 1:20 or if tablets or powder of Domebaro solution are preferred you use one powder in a pint of water. It will keep in a mason jar. Irrigate the ear 3 times a day with that solution and then 3 times a day irrigate the ear with water solution of aureomycin or neomycin.

Question: What percentage of neomycin has Dr. Wrong been using?
Dr. Wrong: My recollection is 50 mg. in 10 cc. of water.
Chairman Osborne: So far we have not used neomycin because it has not been generally available. We have had to use aureomycin. I think we should wait until neomycin is generally available.

Chairman Osborne: We have been talking about the seborrheic type of external otitis where the seborrheic dermatitis of the scalp often begins as a cradle cap. Sometimes the children develop a so-called type of seborrheic eczema. You must treat the middle ear infection before you can hope to clear up the infectious dermatitis that develops in the external ear and down the neck from the drainage.

Dr. Lawrence Breslow, Chicago: Would you please express your opinion on vioform cream? A lot of us use it for these cracks when there is no other seborrhea.

Chairman Osborne: It is an excellent preparation for these chronic cracks which are not associated with seborrheic dermatitis. In children it is best to use below 3%, preferably 1 or 2%.

Dr. Margaret A. Limper, Louisville: Is there any objection to using peroxide irrigation to get rid of the excess debris in the external canal before starting treatment?

Chairman Osborne: There is no objection to that at all; I merely emphasized that we should not use grease and oil or salves in the ear canal. It plugs them up; it very often shuts them off with the growth of bacteria inside of the plug. Use of water solution, either vinegar or aureomycin, to irrigate out is best.

Dr. Warren Fargo, Cleveland: Dr. Wrong speaks about clearing up the scalp. By implication does he mean that neomycin will do that?

Chairman Osborne: We will discuss that at length a little later on.

Dr. Frank E. Roth, Hartford, Conn.: You speak of cracks in the ears where you have seborrhea but how about treating the crack in the ear where you have no seborrhea? What is that caused from?

Chairman Osborne: That is often due to staphylococcus or streptococcus, usually the latter. As a matter of fact, cracking behind the ear is more commonly associated with seborrheic dermatitis than with any other condition. And you find those same organisms in seborrheic dermatitis. Now let us not confuse the development of specific allergy to nickel from the bows in glasses. That is
a different condition when it begins at the top of the ear; bacteria always grow in that. We are
talking now about the cracking in the fold of the ear and the formation of seborrhoeic or yellowish
crusts which extend down on beyond the lobe of the ear. I agree with Dr. Wrong and prescribe
3% vioform cream or less depending on the age of the child.

Now about the scalp: there are hundreds of preparations which may be used on the scalp. Here
is a preparation that is clean and does not contain any grease: depending on the age of the child,
anywhere between 2 to 5% salicylic acid, one tenth of 1% mercury bichloride, propylene glycol
30% in 95% alcohol. Then there is a commercial preparation called topisol® which can be used
instead of propylene glycol. It is a clear nongreasy lotion that can be applied every day, it dries
readily and is very potent. You can alternate that with a water solution of aureomycin or neomycin.
Both have the great value of not staining the hair and both are water soluble. They can be
sponged in once a day where there is discharge and evidence of bacteriologic staphylococci and
streptococci. If you have time to do that, the aureomycin and neomycin are extremely effective in
those cases.

That also applies to the condition when it appears in the eyebrows: granulated eyelids are
evidence of seborrhoid dermatitis; the same organisms are present there. Aureomycin, terramycin
and neomycin in the treatment of the eyelids is much better than yellow mercury of oxide.

Question: Is your preparation used in the scalp just once a day?

Chairman Osborne: Once a day is sufficient. I would like to bring up one other point at this
time. I have had opportunity to observe quite a number of cases with the development of dermatitis,
some mild and some very severe, from the use of sulfa drugs and penicillin in the mouth and nasal
cavities. As far as I am concerned I am opposed to the use of sulfa drugs and penicillin in the
mouth or in any cavities. I am in favor of the water solution of aureomycin or neomycin or terra-
mycin as a mouth wash or a gargle.

Dr. Ross: I agree with Dr. Osborne that you get greater absorption from the mucous membrane
and I never prescribe any kind of sulfa ointment to be used in the eye or nose.

Dr. Wrong: I believe that one of the most prominent places where we see the development of a
dermatitis due to medication is in the external ear where sulfa has been used a great deal in the
past and because there is resistant infection there, penicillin ointment is of no or very little value.
It is common to see a contact dermatitis due to medication about the external ear.

Dr. Alonzo deG. Smith, Washington, D.C.: Did I understand you to say that you oppose the use
of sulfa or penicillin in the nose?

Chairman Osborne: I do. I feel that there are other things that you can use without any danger
that are just as good or better.

While we are talking about skin infections we want to talk about parasitic skin infections,
scabies and pediculosis—pediculosis capitis and pubis particularly. We will not go into the diagnosis
of these conditions but we do have a few words to say regarding treatment of these conditions,
especially in children.

Dr. Wrong: When I came back from the services, I was entirely sold on the use of benzyl
benzoate, 20% emulsion in scabies. It works extremely well in adults but it does not work as well
in children because it causes a lot of stinging and burning and, therefore, the parent does not apply
it. For that reason I have gone back to the use of sulphur ointment, which we use in 10% or
in the case of a very fair thin-skinned child 7½%, applied for 3 nights. It is mussy; children don't
mind it but adults do. However, if applied properly for 3 nights covering every square inch of
body from the chin to the toes, it is effective.

As far as the treatment for pediculosis is concerned we have used a 5 or 10% DDT in talcum
powder, not in solution, applied once or at the most twice a week for 2 applications. It is very
effective. It does not remove nits, however, which is a handicap, particularly in a small girl with
pediculosis capitis; the fond mother does not like to see the nits remaining in the hair.

Dr. Ross: I use sulphur ointment in the prescribed strength with good results.

Chairman Osborne: I have fairly strenuous feelings about the treatment of scabies in children
as well as adults and I agree with Dr. Wrong and Dr. Ross in regard to the sensitizing benzyl
benzoate in strengths of 20 or 25%, the ordinary emulsion. It simply will not work in children. If
you are going to use this per cent you are going to get a lot of children with sensitization from its
use. Especially if the treatment is repeated. There is a very excellent preparation on the market.
It combines an all-purpose parasiticide with an analgesic that is an excellent preparation. It can be
used not only on scabies but in pediculosis capitis, pediculosis pubis. I mention a product which is on the market which contains only 10 per cent benzyl benzoate which is well within the non-irritating range on children's skin. It contains 1% DDT, 2% benzoic acid, 2% of an emulsifying agent. It is known as Topicide® and is put out by Lilly. The directions for its use: a full bath with soap and water—all the pustules open, the crusts and scales removed. This preparation is then sponged on with a little cotton or gauze from shoulders to toes without missing a single square centimeter of body surface. The first layer will dry in about 5 or 10 minutes and then another layer is sponged on from shoulders to toes. The child or adult is put to bed in a warm bed for a period of 8 hours, overnight at least; they then take a bath with clear water and use plain talcum or calamine lotion. This treatment under no circumstances should be repeated in children under 4 weeks.

In children you will find the development of many pustules due to killing organisms in the skin. You will have abscesses and a spreading dermatitis. In many cases some of them are deep; they do not respond. These cases immediately after they are treated for scabies must be treated for their infectious dermatitis, as a result of secondary infection; those can be treated with a water solution of aureomycin, terramycin, neomycin; they can be treated with moist dressing. One of the greatest mistakes of men in general practice is the repetition of that treatment if the patient does not get well in a week. In a bad case of scabies in an infant, the itching may be relieved the first night with this application but very often at the end of a week the child's skin looks worse than it does the first night. The reason for that is that tremendous numbers of organisms are killed and the eggs killed by the preparation itself. A secondary infection sets in and a rough time is had by all until a week or 10 days or until the secondary infection can be brought under control.

We insist that every member of the family be treated, whether the other members of the family show evidences of scabies or not.

In the case of pediculosis capitis, wash thoroughly with soap and water, dry the scalp, apply this preparation thoroughly and put on some form of a cap overnight and wash out thoroughly with soap and water. One treatment is usually sufficient and certainly one treatment is all that is necessary in pediculosis pubis. The benzocaine relieves itching and since you only apply it once it has no sensitizing value.

Question: Have you had any experience with a product on the market for the treatment of scabies called Quell®, which is a water-soluble cream? It is supposedly nonsensitizing.

Chairman Osborne: We have had quite a little experience with it and found it was not superior to benzolbenzoate.

I would like to ask Dr. Wrong to start the discussion on flea bites. Fleas are no respecter of persons. They pick out certain individuals who probably become sensitive to the substance which the flea injects. Fleas get on the feet and legs from the floor and garden; certain cat and dog fleas will attack the human as well as the common sand or garden flea.

Dr. Wrong: DDT is remarkably effective in killing fleas. Calamine lotion containing one fourth per cent methol and one per cent phenol is very effective. The important thing is the eradication of the fleas. The other thing is to be flea-conscious. If you see a child with an eruption, think of the possibility of flea bites—particularly if the lesions seem to be about the ankles and later involve the legs, thighs, etc.

Chairman Osborne: Flea bites are becoming more common in the East. The men in California now have been familiar with flea bites for a number of years but apparently the incidence of flea bites is rapidly on the increase in the East. We are learning a great deal about fleas. For one thing, only about one person in 20 or 30 is susceptible or, in other words, develops a specific allergy to the venom of the flea. This explains the low incidence in families. Most adults, when you make a diagnosis of flea bites, doubt it. The best way to get around that is to tell the parent of a child that you have had flea bites too. There is nothing wrong about it.

We also know that there are ground fleas. They are everywhere on the ground. All animals get fleas and they are carried around. You can get flea bites on the golf course as I myself do. They remain viable in carpets, rugs and furniture for months which explains why under the proper conditions the eggs hatch and produce fleas that will bite. One of the common sources of infection is cars in which dogs ride and have deposited eggs on the seat.

Dr. Ross: We do use the antihistaminics in bee sting, where a person is particularly allergic...
to the sting; the antihistamincs do give fairly prompt relief in most cases. I haven't had much experience with the flea bite.

Chairman Osborne: Well, you agree, Dr. Ross, that any antihistaminic should help any insect bite, that is, theoretically?

Dr. Ross: Yes.

Dr. Frank H. Douglass, Seattle: Is that used locally or orally?

Dr. Ross: Both; I usually give the tablets and apply the ointment as well. They get a more prompt relief from the locally applied ointment and then the tablet will tend to reduce the swelling.

Chairman Osborne: It should be by mouth and as Dr. Ross has pointed out there is an analgesic effect from antihistaminics which is aside from its antihistamine effect. They are all mild analgesics

Frank H. Douglass, Seattle: In severe cases, that is, theoretically?

Chairman Osborne: That is the panel's agreement that this is a practical thing to do with bites by the use of antihistaminics. They are sensitizers too, but they can be used locally with benefit as Dr. Ross has said.

Now there are one or two more things about insect bites that are of practical importance to all of you. One is this: the use of the army insect repellant made by DuPont and used by all the allied armies in the war. #618 is an excellent insect repellant and can be sprayed on or sponged on the skin or on clothing. Furthermore for many insects including fleas but not including most flies, especially the black flies of Canada, vitamin B1 taken internally is an insect repellant. In children up to a weight of about 85 or 90 lbs. the dose is 25 mg. to 50 mg. 3 times a day. It doesn’t always work but I have had some startling and phenomenal results in prophylaxis by the use of thiamin-hydrochloride by mouth, combined with the insect repellant sprayed on.

Chairman Osborne: I would suggest in severe cases where the patient is in bad shape from multiple bites that you use intravenous antihistaminics. With children you can gauge your dose from 5 up to 30 mg. daily intravenously, sometimes given twice a day.

Dr. Ross: I forgot to mention ACTH. I think that would be the ideal method of rapid treatment.

Chairman Osborne: I would like to point out before we go further that the panel has agreed on this: that wherever the allergen is removed, ACTH is extremely effective treatment.

I would like to discuss the subject of hemangioma in some detail. I realize that some pediatricians advise against any treatment at all of hemangiomas. But that is more easily said than done. If the hemangioma is on the trunk or any nonexposed part, I often advise that it be left alone, because spontaneous thrombosis is bound to occur sooner or later and the lesions disappear with only some faint atrophy remaining. A large number of hemangiomas are unsightly. They occur on areas that embarrass the parents and create a terrific sense of inferiority on the part of the child; furthermore many of them undergo spontaneous ulceration, especially those subjected to moisture. All the things you don’t want to happen can be avoided by careful treatment. Now let it be said that no member of this panel is advocating the widespread treatment of hemangiomas by persons who are not qualified trained individuals. I would be the first one to admit that thousands have been treated injudiciously in years gone by, that scars have been produced and all sorts of ill-considered treatment has been given that has only resulted in criticism of the medical profession.

Properly given, treatment can be rendered to these hemangiomas that is extremely satisfactory. The treatment is rather simple today and must be with highly filtered radiation. We don’t want to go into details of technic but that is the secret of it. A minimum of 1 mm. of lead filtration must be used and not over ½ of an erythema dose must be given. The treatment must not be repeated under 2 months and in subsequent treatment the interval should be 3 months. Now you can treat a hemangioma the size of a dollar in the scalp or a half dollar or less can be treated with radiation in that way without the loss of any hair. You can’t tell where the lesion was.

Whenever you see a hemangioma treated and there is radiation reaction you can make up your mind that the result a year or 2 or 3 later is going to be poor. You must never get reaction from radiation.

Now we want to say a few words about pigmented nevi. It must be remembered that hairy nevi never or almost never become malignant. However, both flat and raised pigmented nevi of any color may become malignant. A raised pigmented mole is no more harmful, per se, than is a flat pigmented mole. The final differentiation should be on the basis of geographic distribution on the body and whether that particular area is subjected to irritation. If a pigmented nevus, either flat or raised and nonhairy, is subjected to irritation, it should be removed. They are best removed by plastic surgery. When they are small they can be removed by a man experienced in electrosurgery.
The areas most subject to irritation are the feet, toes, around the ankles, the palms, fingers, face or where there is a belt, girdle or strap or article of clothing which produces frequent trauma. Those lesions should be removed. However, it is impossible to remove or recommend the removal of all pigmented nevi. Our basis for differentiation should be on the basis of whether the lesion is subject to irritation.

Dr. Wrong: I would also like to point out that on an average we have 15 to 20 of these pigmented nevi and malignant melanoma is a relatively rare disease. When a mother consults us about a child who has a nonhairy mole and asks about the chance of this becoming a malignant growth, I think we can say it is extremely remote. I agree with Dr. Osborne that these lesions in irritating areas should be removed but the chances of one mole becoming malignant is extremely less than that child being struck by lightning.

Question: What about the fact that you may cause it to become malignant by removing it and along with that what about the time interval for removal? There has been some question as to whether they are better removed before puberty or after puberty.

Chairman Osborne: It is perfectly true and should be emphasized that pigmented moles in children do not reach their greatest development until sometime around puberty. Therefore, if a pigmented mole is removed too early, the surgeon, unless he goes over a very wide area, is not going to get it all. I seldom remove any of these pigmented lesions (unless they are irritated) until a child is around 10 or 12 years of age. Furthermore regarding whether removing these lesions induces malignancy—if it is improper treatment with acid or if it is due to injudicious electrolysis treatment, it is bad treatment. It must be total removal and you must make sure that you get all the pigment cells. If it is surgical removal by a plastic surgeon I always take an indelible pencil and make an oval mark along the lesion from 1/8 to 1/4 inch beyond the border of the lesion where the excision should be.

Dr. Wrong: Regarding radiation of moles, I think it is extremely poor treatment. We have all seen cases where heavy doses of radium have been given which have resulted in radiation changes in the skin and a mole growing in the center of this radiation change.

Chairman Osborne: We will now discuss the cutaneous allergic conditions in children. This is a big subject and we are going to take it up in detail and follow a definite outline. We will catalogue these conditions in children chronologically depending on the age of the child. A dermatitis in a newborn infant is different from a dermatitis in a child 5 or 10 years of age. That there are several age groups as a factor is something we all agree on. When you speak of percentages as applied to the various types of eczema occurring in infants and children, it depends entirely on the age group in which the child falls. Certain causes are operative in the newborn that do not operate after 6 months. Certain causes are operative in the period of from 3 to 5 months that are not operative after 5 years so that we are going to talk about this from a chronologic standpoint. Secondly, and from a general standpoint, it is well to remember that external contact, when a contact dermatitis is produced by an allergen, is produced by reaction in the epidermis and the essential lesion is a vesicle in the epidermis. That comes from the application of any chemical substance. Poison ivy is a good example.

Dr. Ross: In the young infants, as we mentioned before, caution is necessary in the use of soaps. In some young infants they definitely act as irritants. The overvigorous use of soap is to be avoided. Another cause of trouble is the use of oil and particularly medicated oil. These block the pores of the skin and are a possible source of irritation. Some of the drug houses stress the use of these oils so much that the mothers frequently overdo the use of them.

Chairman Osborne: I would now like to have Dr. Ross discuss contact dermatitis in the young age group. Remember we are now talking about babies and young infants.

Dr. Ross: Dermatitis venenata is a contact dermatitis and here comes into play the fact that wool may act as a primary irritant and also as a sensitizing agent. Babies in the northern climate are in contact with wool all winter long and, though we tell the mother to avoid the use of wool, we find them putting a wool blanket right up to the baby's face and the baby is breathing in the wool lint.

Chairman Osborne: Dr. Ross, how old does a child have to become to show the first effects of sensitization?

Dr. Ross: There is an interval, in my experience, of 3 to 4 weeks before you get a true dermatitis
AMERICAN ACADEMY OF PEDIATRICS

—allergic types of dermatitis occurring. From then on you must be on the lookout for these cases. I believe that food plays a large part in this age group. I find out exactly what foods the baby has had from birth and if the baby is on breast milk. I believe the irritation may be due to the breast milk containing an allergen. If the baby is on cow's milk plus orange juice and cod liver oil, it may be one or all 3 of these foods which have some effect on the allergic dermatitis. I like to give evaporated milk; this milk should be boiled a little longer than usual. I am in the habit of telling them to boil the milk for a half hour or longer and I believe the milk is then desensitized as well as we can make it.

Many of the cereals on the market are not good because they contain a mixture of alfalfa. Plain barley cereal or rice cereal are preferable. You can often see these rashes clear up within a few days.

Chairman Osborne: Is it true that eggs, wheat and milk constitute in your practice the principal allergenic substance when food is found to be at fault?

Dr. Ross: Yes and pretty well in that order.

Chairman Osborne: Do you ever prescribe an elimination diet in which eggs, wheat and milk are all eliminated at one time or do you prefer doing one at a time?

Dr. Ross: In the older infant where all 3 foods are being given, they may all have to be avoided at the one time if the eczema is severe and particularly if some clues have been obtained on skin tests. I am speaking of an infant over 6 months of age; in such infants elimination diets avoiding all 3 of these foods are started.

Chairman Osborne: I have had a number of pediatricians tell me that one of the things they do with these children is to put them on a soy bean milk for a period of 10 days, not allowing anything else. Do you think that would be a good procedure?

Dr. Ross: That is certainly a very restricted diet but for a short period of time it might be necessary as a trial period. You mention 10 days and I don't think that is long enough to give that diet proper trial. I believe it ought to be supplemented with an animal protein to get the best growth and development in these infants. I am in the habit of adding a small amount of meat protein to the soy bean diet.

Chairman Osborne: Dr. Ross and I have a difference of opinion to a minor degree; it is one of percentages and it is possible that it is due to many factors. One is that he sees a great many cases in children—he is a pediatrician. I see patients in consultation. Many of the patients he sees would have cleared up before I would get to see them. Our view is this: the food factor in this age group, we believe, is not as high as 50%. Many of us believe that it is 20 or 25% maximum in this age group rather than the 50% of Dr. Ross.

You must follow a definite scheme and plan in these food allergies. I would urge all of you as pediatricians to set down a definite plan of operation as Dr. Ross has outlined and follow that through so you are sure that there is no food factor in the eczema. If you do that and if the dermatologist would do that in cooperation with the pediatrician, we wouldn't have these large fields for disagreement.

Dr. Walter C. McKee, Chicago: May I state what I believe to be the discrepancy in the percentage. I think the average pediatrician has eliminated most of the food before you see them. That is why you have a smaller percentage.

Chairman Osborne: I would like to have Dr. Ross evaluate skin tests in the form of scratch and intradermal tests in this particular age group—just how much he uses them and of what value they are.

Dr. Ross: I think the skin testing in the past has probably been overrated. More conclusions were drawn from positive food tests which readily appear. We find we get positive tests from egg before the child has ever had an egg. It must be by trial feeding (feed and then withholding that food) that the proof is shown. I like to do the food test reaction and sometimes proof may be obtained.

Chairman Osborne: Since I believe that foods do not play as important a role as many other people believe they do, one must have something else to fill the vacuum. I am absolutely convinced that we are not paying enough attention to wool as an allergenic substance in these children up to the age of one year. Furthermore, I am convinced that dermatologists, pediatricians and allergists are not doing a good job of eliminating wool as a source of allergen.

Many men do not eliminate wool even in the presence of a positive skin test to wool. In our
experience it is necessary to eliminate all wool rugs, carpets and all woolen blankets from the house, not just from the room. Also, you must eliminate contact with woolen sweaters, clothes on parents and all those in contact with the child.

For about 12 years we have been doing microscopic examinations of dust for wool content. I am convinced that as the child gets older, foods in general become less important but that inhalants become more and more important. They spontaneously lose their food sensitization and they acquire other sensitizations. So as the child gets older it is more a problem of an inhalant allergy. Now, wool has been entirely overlooked in many ways. Never has anyone made sufficient effort to eliminate wool as an allergen. No one has ever done microscopic examination of house dust for wool fibers. Now it can be done until you get the percentage of wool in house dust down under about 3%.

Dr. Ross: The tendency to outgrow food sensitivity occurs between 3 and 5 years of age as a rule. They tend to develop strong sensitivity to any of these inhalant group of substances. I haven't been able to show in our testing that we get as high a proportion of wool sensitivity as Dr. Osborne gets with his testing; however, I think it is also very common in children over one year of age. They begin to develop more inhalant allergy and wool is one of the most important. I think other things must be considered. The child may sleep on a mattress that contains a great deal of kapok—we get a number of these cases. There are felt mattresses that even have cattle hair in them. We find that it is a multiple sensitivity—wool is an important part of these multiple sensitivities or there may be one or more that play an equal part. If you eliminate one you must also avoid another. I think this brings up the point of prevention. When we get a case that is sensitive in early infancy we invariably tell the parents you must avoid feather pillows. If the mattress is the ordinary felt type, it must be covered to avoid further sensitivity. When you know this child is in the allergic bracket it tends to develop inhalant allergy further on.

Chairman Osborne: As you can see, the members of this round table feel that in regard to eczema the first effort, no matter how old the child, whether the infant is under 6 months or the child 16 years of age, the first effort should be made to make an etiologic study. We are all agreed that it is the proper approach to eczema.

I would like to have Dr. Ross give an opinion as to the psychogenic factor in eczema.

Dr. Ross: I must say I have discounted the psychogenic factor entirely. Maybe I am very delinquent in this since some recent articles stress this rather strongly. I don't believe that the psychogenic factor comes into play—certainly not until the child is well over 10 years of age.

Chairman Osborne: We certainly should not overlook the psychogenic element in the older children and young adult or any adult as a matter of fact but it is more of a trigger mechanism and in my opinion never acts as a primary cause of atopic dermatitis. I think that too much emphasis has been placed on this in medical literature and in the press and that it is a good cover-up for ignorance in many cases. A ready answer to explain many things! I have never seen a psychiatrist who has cured a case of eczema. They just don't cure these cases. But the psychogenic element when it does exist, and it has been proved by experimental work, can have a marked effect upon the blood vessels in the skin and be a trigger mechanism affecting the severity or degree of any eczematous process. But it should never be regarded as a primary cause of such a process.

Dr. Albert J. Sheldon, Santa Ana, Calif.: What about washing diapers in detergents?

Chairman Osborne: It has been shown microscopically both by physicians and by the Laundrymen's Association that the use of any soap produces a gradually increasing deposit of insoluble salt of calcium and magnesium combined with the fatty acids of soap which pile up gradually after layer on the cotton fibres of diapers. When the material comes in contact with the acid secretion of the skin some of it is dissolved out and acts as an irritant. Now the best way to wash out the diapers in a simple detergent which is completely rinsable—Swirl, Drei and Vel are the best. They are completely rinsable and they leave no deposit.
Round Table Discussion: PEDIATRIC DERMATOLOGY
EARL D. OSBORNE, JOHN R. ROSS, NORMAN M. WRONG, WALTER C. MCKEE
and GEORGE S. FRAUENBERGER
Pediatrics 1952;10;710

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://pediatrics.aappublications.org/content/10/6/710