

**Staff Meeting Bulletin**  
**Hospitals of the . . .**  
**University of Minnesota**

**Tuberculosis of the Skin**

STAFF MEETING BULLETIN  
HOSPITALS OF THE . . .  
UNIVERSITY OF MINNESOTA

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during the school year, October to May, inclusive.

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William A. O'Brien, M.D.

I. LAST WEEK

Date: April 15, 1937

Place: Nurses' Hall  
Recreation Room

Time: 12:15 to 1:20

Program: Movie: Tiny Water Animals.

Abstract: Congenital  
Intestinal  
Atresia

Case Reports: 3

Present: 136

Discussion: L. Titrud  
L. G. Rigler  
E. A. Boyden  
W. F. Bowers  
W. H. Cole  
O. H. Wangenstein

II. MOVIE

Title: India on Parade

Released by: M-G-M

III. ABSTRACTTUBERCULOSIS OF THE SKIN

Carl W. Laymon

Cutaneous tuberculosis, though not frequently observed in America, is extremely important for many reasons. The tuberculodermas, along with the various syphilides offer perhaps the best opportunity to study the complicated processes in allergy of infection, the variations in resistance offered by infected individuals and the manifold possibilities of reaction, both cutaneous and internal, in the infected organism. Too long have dermatologists looked upon the tuberculodermas as isolated skin lesions, probably

because in contrast to syphilis for example, the original infection is almost always internal and hidden. The natural history of tuberculosis and the reactive capabilities of the patient with cutaneous tuberculosis are often lost sight of in pondering over the tuberculous lesion rather than the disease in its entirety. As Michelson recently stated, natural history of the disease should be our guide in approaching cutaneous tuberculosis, realizing that a constant struggle exists between the invading bacillus and resisting forces of the host. This view enables us to better understand the various phases of activity and quiescence of a tuberculous cutaneous lesion, the lability of some tuberculodermas, the stability of others, and the impossibility of arbitrary classifications with sharply drawn boundaries to all forms of tuberculosis of the skin.

Primary Cutaneous Tuberculosis

It is well known fact that in both internal tuberculosis infections in man and experimental external infections in animals, the host reacts differently to the first implantation of tubercle bacilli than to subsequent ones.

In the guinea pig following the first inoculation of the bacilli into the skin an infiltration followed by a crust-covered superficial ulceration results within a period of two weeks. The regional lymph nodes become enlarged constituting what is known as the primary complex. However, as Koch showed as early as 1891, if the animal is again inoculated after 4 to 6 weeks an entirely different reaction ensues. Within 2 days (rather than 2 weeks) the point of inoculation becomes indurated, soon ulcerates and sloughs, only to heal rapidly and permanently. The regional nodes do not become involved. The reaction of the host to secondary inoculations is obviously profoundly influenced by alterations in the immunologic response occasioned by the primary infection. "Tuberculosis immunity" is of course indefinite and not clear. It is nevertheless known that beginning with

the first inoculation some biologic change occurs in the organism which alters reactions against the tubercle bacillus from then on.

In man, due to the fact that most primary contacts with the tubercle bacillus occur in the lungs (Ghon tubercle) or at other internal points (gastro intestinal tract) the importance of the skin as a portal of primary infection has been largely overlooked. It is indeed true that in cutaneous tuberculosis, almost without exception, the patient carries a latent or active tuberculous infection before the integument becomes affected. According to Brunsgaard's studies in Denmark only a small number of children were tuberculous while the percentage rises sharply with increasing age. Thus primary infection in the skin, just as in the lungs or gastro intestinal tract occurs most frequently from the ages of 2 to 6 years, occasionally up to puberty, and only with extreme rarity in adults. The primary infection in the skin or mucosae is comparable to that occurring internally, consisting of an ulcer at the site of inoculation accompanied by a constant adenopathy. The diagnosis however is not always easy to make on account of the variability in the appearance and localization of the lesion, in turn depending upon the number and virulence of the infecting bacilli and the inherent reactivity of the host against the specific virus.

The primary lesion can be small and superficial healing within a short time, or deeper and indurated strongly resembling the syphilitic chancre, especially when localized on the genitals.

In the beginning the nodes are freely movable resembling those in primary syphilis but as a rule become matted and perforate to the surface. The tuberculin reaction, while negative at the time of inoculation, becomes strongly positive within a few weeks (Wahlgreen, cited by Krantz: 6 to 7 weeks). The histologic structure of the ulcer and nodes is tuberculoid and bacilli may be recovered in smears and by animal inoculation.

So-called circumcision tuberculosis represents a special type of the primary cutaneous tuberculous complex, resulting from direct infection of the genitals following ritual circumcision among Jews, and Mohammedans. When hemastasis is accomplished by oral contact an extraordinarily large number of bacilli are brought in contact with the wound, should the operator have an "open" case of tuberculosis.

In these cases the wound gradually heals within a period of 4 to 6 weeks following the operation. However a tiny ulcer with a purulent base and undermined, infiltrated borders usually persists near the frenulum. The inguinal nodes become enlarged 2 or 3 weeks later and usually soften and slough to the surface. The prognosis is unfavorable although a fatal result is not always the outcome. Wolff followed 46 of 58 patients who had suffered with primary circumcision tuberculosis 1 year previously. Of the 46, 27 were living and 19 dead at the end of the year. Of the original 56, 8 were followed to the age of 6 years by which time 3 were dead and 5 living. Almost all of the latter group suffered with some type of secondary (though mild) tuberculosis. Wolff, applying the same ratio to the 19 patients whom he could not follow (out of the 27 who had lived one year after infection) estimated that of the total 46, 27% survived and 63% succumbed. It was known that 5 patients of the group terminated in miliary tuberculosis.

Krantz, in reviewing the subject of the primary complex, cited cases in which the portal of entry was the tonsil, nasal mucosa and mouth (rare). Similar cases have been reported by Akerberg, Ghon, Dittrich, Bezecny, Siegl, Rotnes, Ranke, Holt and Rochat. Kleinschmidt (cited by Duken) observed 3 cases of primary infection in the middle ear. As to therapy, most authorities feel that conservatism should be the key note. Excision and curettage of the primary ulcer should be avoided. Roentgenotherapy of the nodes especially before suppuration occurs, has been given favorable mention.

## Secondary Cutaneous Tuberculosis

Except for the rare primary complex, it is reasonable to assume that all other tuberculosis of the skin is secondary, from the standpoint that an active or latent tuberculous focus is existent at some point in the host. This does not mean however that all tuberculodermas result directly from bacilli from this focus, thus admitting the possibility of a secondary external infection with bacilli other than the patient's own. It is obvious that a comprehensive consideration of all the forms of cutaneous tuberculosis is impossible within the short time allotted for the discussion. In the ensuing comment only a few facts concerning the best known tuberculodermas can be elucidated.

As Michelson and Winer stated in their recent paper on tuberculodermas of the face, the polymorphism of tuberculosis is surpassed only by that of syphilis, but in a study of cutaneous tuberculosis we have neither an accurate clinical course nor a test as reliable as the Wassermann test to depend on. Their excellent article will be briefly quoted in the following discussion. In investigating lesions of suspected tuberculous etiology we have at our disposal the following methods: clinical history and examinations, morphology of the lesion, histology of biopsy specimens, tuberculin tests, blood cultures and inoculations of animals. One will realize that such an investigation is difficult and requires an evaluation of the facts discovered. To make a diagnosis of tuberculosis from a cutaneous lesion is not sufficient. The lesion must be classified, and here we are confronted with the lack of an international classification. We do not believe that a broad term such as tuberculosis cutis is sufficient for a final diagnosis. Because of the great variation in the severity, the course and the prognosis in cutaneous tuberculosis, we are firmly convinced that a more specific diagnosis is desirable.

Present day literature retains many of the older striking names which have been applied to various tuberculous conditions, and, no doubt, these should be used because they often designate the

type of lesion and the localization, as for example the name "lupus pernio."

Whose classification should we accept? After a careful survey of the schemes used by the great authorities on this subject we believe that at the present time it is impossible to advocate any particular one, but it is highly advisable for clinicians and authors to be certain that they clearly understand the definitions and the synonyms for the lesions under discussion, for only then can there be a harmonious conclusion in these matters.

Let us examine some of the prominent classifications. In Professor Jadassohn's clinic, cutaneous tuberculosis is classified under three headings:

1. Tuberculosis of the skin in the classic sense, which included lupus vulgaris, tuberculosis verrucosa cutis, colliquative tuberculosis and certain mixed forms.

2. Tuberculids, including lichen scrofulosorum, rosacea-like tuberculid, erythema induratum, papulonecrotic forms and lupus miliaris faciei.

3. Sarcoid reaction types embracing Boeck's and Darier-Roussy's sarcoids, lupus pernio and granuloma annulare.

Professor Kren has much the same scheme. He uses three headings:

1. True tuberculosis of the skin. Under this he places lupus vulgaris, lupus pernio, colliquative tuberculosis, tuberculosis ulcerosa miliaris and miliary tuberculosis as transitional forms into the tuberculids.

2. Tuberculids. These include lichen scrofulosorum, papulonecrotic tuberculids, Boeck's lupoid, acne telangiectodes, subcutaneous sarcoid, erythema induratum and livedo racemosa (Adamson).

3. Diseases whose tuberculous etiology is not certain but probable. These are; granuloma annulare, lichen nitidus, angiokeratoma, various disseminated erythemas and lupus erythema-

tosus.

Gans uses the mode of dissemination of the bacilli to the diseased parts as a basis for his classification:

1. Forms which come forth mostly as progressive, single foci, including tuberculosis cutis luposa, verrucosa, colliquativa and ulcerosa.
2. Forms which extend by way of the blood stream, comprising tuberculosis cutis miliaris acuta generalisata, lichenoides, papulonecrotica, luposa miliaris disseminata, indurativa (typus Bazin, Darier-Roussy, Boeck), lupus pernio and angio-lupoid.

Rost in a learned and original way classifies cutaneous tuberculosis on a clinicomorphologic basis and on an immunologic basis. He uses three broad groupings: (1) tuberculosis ulcerosa; (2) tuberculosis luposa, colliquativa and verrucosa; (3) tuberculids.

It will be noted that although there is some variation, the seasoned clinicians are much in accord except in the case of the disputed forms. Lupus miliaris faciei is a good example of such a type, and the aforementioned authorities evidently do not view it in precisely the same way. The studies of allergy in cutaneous tuberculosis as carried out by that great master, Jadassohn, and by his disciples, the works of Ghon and Ranke in pulmonary tuberculosis and the writings of Kren, Volk, Dittrich, Rost and Brunsgaard point out many striking and well established facts. We learn that a tuberculous bacillemia is a reality even though an actual demonstration of the bacilli in the circulating blood is not always possible. Furthermore, the factors which mobilize the organisms and the reasons why, when circulating, the bacilli seek certain tissues in which to multiply are not known. We predict what the reaction of the tissue will be which will result in a particular type of demonstrable lesion. No doubt such varied factors as the number of bacilli, the vulnerability of the local tissues, the season of the year, the geographic location, the general resistance, race, sex and consti-

tutional type of the host, the state of nutrition in the chemical sense and many other influences play a part.

The most striking thing that impresses one in undertaking a review of tuberculosis of the skin is the small number of cases of lupus vulgaris in America. In the European clinics the cases of lupus outnumber the sum total of all the other types of tuberculodermas many times over. In our clinics, on the other hand, the other types combined make a much larger aggregate than the cases of lupus. An explanation has not been found.

#### 1. Tuberculosis verrucosa cutis:

The relatively common verrucous type of cutaneous tuberculosis is exemplified by the so-called postmortem wart (*verruca necrogenica*), which results from the external implantation of tubercle bacilli in a previously infected individual. Of course other types of this form of tuberculosis exist.

Histologically tuberculosis verrucosa cutis is characterized by the hyperkeratosis which always occurs, and by the underlying more or less typical tuberculous infiltrate in the upper portions of the corium. Patients with tuberculosis verrucosa cutis as a rule react strongly to tuberculin, even in marked dilutions.

#### 2. Lupus vulgaris:

*Lupus vulgaris* is a true tuberculosis of the skin in that the bacilli can be found in a reasonably high percentage of searches, animal inoculations will usually yield positive results, and the histologic changes are accepted as being in keeping with those found in tuberculosis.

*Lupus vulgaris* is the most important example of cutaneous tuberculosis. It is a chronic form occurring in persons with a high degree of resistance; it is probably secondary to an internal focus even though this cannot be revealed, and it is characterized by the formation of the so-called lupus nodule, which is made up of a tuberculous infiltrate undergoing a fatty homogeni-

zation accompanied by a certain amount of hyperemia. Under pressure with glass small translucent, reddish-yellow areas can be clearly seen; these are the so-called apple jelly nodules that are said to be pathognomonic for the condition.

Lupus vulgaris spreads by continuity; it is partially self-healing, but does not impart enough local immunity to the tissues involved to prevent recurrences within the scars formed. The severity of the process varies greatly as does the extent. The secondary pathologic changes and the anatomic location bring about certain modifications of type, producing such changes lesions as lupus vulgaris hypertrophicus, tumidus and verrucosus.

The face and neck are the most commonly involved areas. The extremities are next, while the rest of the body is only occasionally the seat of true lupus vulgaris. The nasal mucous membrane frequently shares involvement with the face, and the linings of the mouth as well as the tongue may be the seat of lupus.

As a rule, patients with lupus vulgaris react strongly to tuberculin. The Mantoux, Pirquet and Moro reactions are positive locally even in large dilutions. Focal reactions are not so marked. Patients with lupus rarely succumb to internal tuberculosis.

The exact method by which the bacilli reach the skin, the manner of extension and the reasons for location on the face are not known. The recent statistics of A. von Mallinckrodt-Haupt point to climatic and economic factors as being important. He found that far more cases in the Rhine provinces occurred in the poorer mountain districts, and they appeared more often in the cold months.

The differential diagnosis of lupus vulgaris from other forms of tuberculosis is quite simple. Characteristic are: the presence of lupus nodules, the contiguous lesions usually making up a plaque or large area of involvement which is distinctly localized; the chronicity with scarcely any tendency to spontaneous healing, and the lack of ulceration or formation of fistula, with practically

no discharge.

### 3. Colliquative Tuberculosis or Scrofuloderma:

Colliquative tuberculosis or scrofuloderma is a rather common form of cutaneous tuberculosis. This type of tuberculosis, as the name implies, is a form in which the lesions soften and discharge. It may arise primarily in the lymphatics of the skin, forming a cutaneous node which is gumma-like in appearance, or the skin may be secondarily involved from underlying lymphatic or osseous tuberculosis.

The diagnostic points concerning colliquative tuberculosis are well known. The blue color, the very thin adherent, overlying skin and the thin, watery pus oozing slowly or only on pressure from fistulous openings are quite characteristic. Bacilli can be found readily. The inoculation of animals often gives positive results, and the patient's sensitivity to tuberculin is about the same as in lupus vulgaris. There is more of a tendency to spontaneous healing than in lupus. This takes place more by means of a sloughing out or evacuation of the diseased area than by scarring as in lupus. Colliquative tuberculosis does not impart a high degree of local immunization to the surrounding tissues, for lupus vulgaris has often been found to develop about the ostia of the fistulas.

Other forms of cutaneous tuberculosis also develop in persons with the colliquative form; especially in our experience have we observed an associated erythema induratum. Many patients with a combination of colliquative tuberculosis and lichen scrofulosorum also have been reported.

In a classification tuberculosis colliquativa stands in close relationship to lupus vulgaris, to certain deep-seated, large-sized tuberculids and to erythema induratum.

### 4. Tuberculosis Miliaris Ulcerosa:

Tuberculosis miliaris ulcerosa is a severe form of ulcerating tuberculosis which occurs in persons with a

severe form of systemic tuberculosis whose resistance is inadequate and whose sensitivity to tuberculin is either weak or entirely absent. The lesions occur exclusively about the nasal or oral orifices and are often associated with similar ulcers in the mucous membranes. Bacilli are easily found in direct smear; the histologic changes are distinctly of cutaneous tuberculosis. Certain severe forms of lupus vulgaris are also closely related to the ulcerating miliary form.

#### 5. Tuberculids:

The tuberculids typify the external projection of internal tuberculosis on a cutaneous screen. The bacilli are hematogenously disseminated and, because of unknown factors, lodge in certain areas and for a short time grow and flourish. The patients who have tuberculids have a high degree of allergy, as evidenced by their behavior to the tuberculins. The lesions develop rapidly, are extremely labile and, accordingly run a short course and disappear. If the location is quite deep and the necrosis marked, a scar remains to mark the spot. When the conditions are again ripe, a new dissemination of bacilli occurs, and a new crop of lesions is seen. The time between attacks may be long, even years, or one series of lesions may appear as the previous ones are healing. A more or less continuous appearance and disappearance of sparse but widely disseminated papules has been observed.

There undoubtedly is a transition from one type of tuberculid to another. It is impossible for us to set down from a clinical and histologic point of view clearly defined criteria for the differentiation of superficial follicle-like tuberculids from the larger and deeper acnitis.

Lichen scrofulosorum which is rare in America should be grouped with the tuberculids and reacts in practically the same manner. The Moro test is valuable in this type of tuberculosis because of the local reaction. Lichen scrofulosorum, although frequently follicular, is not necessarily so. The microscopic picture contains all the elements that are necessary for a diag-

nosis of tuberculosis.

#### 6. Sarcoids:

Lupoid or sarcoid is a form of indurative tuberculosis about which much has been written, and the variations of size, depth and form have allowed a classification based on these differences. The histologic changes of the established and fixed cases are quite constant and correspond to those of the epithelioid tuberculosis of the general pathologist. Often the lesions are composed entirely of closely packed epithelioid cells divided by septums of connective tissue; at times giant cells are present in varying numbers, and an encircling wall of lymphocytes is occasionally found. Necrosis and ulceration are never encountered. Certain sections of lupus vulgaris can be found which are identical with lupoid. Kyrle and Gans have demonstrated an early acute, non-specific phase in which tubercle bacilli have been found. The patient possesses a positive energy, but arrested or partially checked foci of tuberculosis in the bones, lungs or lymph nodes are often discovered.

In a scheme of classification the lupoids are closely related to lupus vulgaris and to lupus miliaris disseminatus faciei. Their extreme chronicity, their indolence, their lack of subjective symptoms and the complete absence of ulceration coupled with a characteristic microscopic picture make the diagnosis relatively simple.

#### 7. Rare or Questionable Forms:

The etiology of granuloma annulare and lichen nitidus is not fixed definitely enough to be included in this article. Certain tuberculous livedos and erythemas should be mentioned but they are so rare that each case is worthy of a separate report.

#### Comment

In any topographic survey of tuberculosis of the skin one is immediately impressed with the great variation of the clinical picture. The classic types of tuberculosis, such as lupus vulgaris and colliquative tuberculosis, are easily

recognized, and their course is well known. The more transient forms, especially when the lesions are small and run a fairly short course, are much more difficult to identify as belonging to a definite class. In the forms in which the lesions occur in crops, the diagnosis rests not only on the clinical findings but, unfortunately, on the microscopic picture of the lesion that is excised, and it must be emphasized that if multiple biopsies are made it is difficult to make a diagnosis. As Rost has aptly put it, tuberculosis of the skin may be compared to the spectrum, with all its variations in color. We have been impressed with the necessity of a procedure in diagnosing these conditions. We believe that it is best to try, first, to make a general diagnosis of tuberculosis cutis, and then after careful morphologic, immunologic and histologic studies, to attempt definitely to classify the lesion under one of the well known headings. The distribution, the main characteristics not of one lesion, but of all the lesions, a careful evaluation of susceptibility to tuberculin and analytic viewing of the microscopic sections are necessary for arriving at a conclusion. We must emphasize again the need for examining at least twenty-five sections, for we have been struck time and again with the great variation of sections which were taken from the same block. The clinical course, especially with regard to the spontaneous disappearance of lesions, and a careful observation as to scarring are of real value.

There seems to be a definite connection between the site of predilection and the development of the disease, for example, in ulcerating tuberculosis of the mucous membrane or lupus pernio on the nose. The preponderance of any of the trio of cells also has its significance. Dittrich has commented on this, stating that the thickness of the lymphatic wall is an important indication of the direction of the inflammation, that the phases of tuberculosis are divided into an exudative and a productive phase, and that at the end of the exudative phase the productive phase takes the upper hand. He looks on the lymphocyte as the cell that is characteristic of the exudative advance, and on

the epithelioid and giant cells as indicative of the productive period.

There is a definite relationship between the number of bacilli and the chronology. There is a proportion between the lymphocytic wall and immunity, for during the lymphocytic and exudative phase bacilli can frequently be found, while in the tuberculoid period the organisms are destroyed and cannot be demonstrated.

In lupus vulgaris one sees practically every phase of the reaction of the skin to an invasion by tubercle bacilli. The age of the lesion and the anatomic location, of course, influence the development. It is certain that the fresher a lesion is, the more lymphocytes are present, especially at the periphery of the infiltrate. The older the disease becomes, the more epithelioid and giant cells are to be found. The inflammation in lupus vulgaris begins, as a rule, in the papillary body, and it has been noticed that the higher the focus, the more readily are lymphocytes marshalled in defense. Early lupus vulgaris is sometimes difficult to diagnose, for it looks more like a chronic diffuse inflammation, but usually on examining serial sections, epithelioid cells will be found, especially in the center, and in due course a tubercle will be formed. In cases which are clinically lupus vulgaris the microscopic picture can be identical with that found in lupoid of Boeck. Anatomic location also plays an important role, for where many hairs are present, giant cells develop more readily. Central necrosis or caseation is not a necessity for the diagnosis of tuberculosis. With elastic tissue stains most forms of tuberculosis of the skin will show the remnants of blood vessels in or near the center of the lesion. In fact, most cutaneous tuberculosis may be looked on as arising from a hematogenously borne infection.

In reviewing the various forms of tuberculosis of the skin it is believed that the variations in the clinical findings and the similarities in the histologic picture are impressive and show that the individual factors, each

exerting its particular influence on the others, finally come into a state of balance which allows the host to react in a certain manner against the invaders, and that the resulting lesions may pass through transitional phases before the predominating type comes into the majority. Then, and only then, can a final classification of type of cutaneous tuberculosis be made. In many cases this occurs rapidly, so that a diagnosis of a particular type of cutaneous tuberculosis is apparent from the beginning, but in a few patients a careful evaluation of all the pertinent observations is necessary.

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#### IV. CASE REPORTS

##### 1. SARCOID

History: The patient, a white German male, aged 73 years, stated that a lesion had been present on the left arm near the elbow since May, 1936. A second lesion appeared about a month later near the left wrist. The latter almost completely disappeared following ultraviolet light therapy. A third small lesion has been noticed within the past month. There was no family nor personal history of tuberculosis. There was no history of syphilis.

##### Examination

On the extensor surface on the left arm near the elbow, there was an oval, thickened, reddish-brown plaque, which measured 3x3.5 cm. A similar lesion 0.3 cm. in diameter, was situated near the large one. The skin over the dorsum of the left wrist and medial surface of the forearm near the elbow was slightly erythematous and felt infiltrated and thicker than normal.

##### Laboratory

The Kolmer Wassermann and Kline tests were negative.

The Mantoux test (1:1000) was negative.

The histologic findings were consistent with a diagnosis of sarcoid.

##### 2. TUBERCULOSIS COLLIQUATIVA

History: ., a white female, aged 72 years, first developed painful nodules on the left side of her neck 2 years ago. Several of these had been lanced and continued to drain a purulent material for a long time. She has been married twice, her first husband was accidentally killed, her second and the two sons she had by him died of tuberculosis in 1916 and 1918.

##### Examination

Examination revealed many draining sinuses from which purulent material could be expressed. Numerous pitted scars were present and several nodules could be palpated under the angle of the jaw.

##### Laboratory findings

Inoculation of material into a guinea pig gave positive results for tubercle bacilli. Cultures on Saboroud's agar were negative. The tuberculin test was strongly positive in dilution of 1-10,000.

Roentgenograms of the chest were negative for tuberculosis.

##### 3. LUPUS VULGARIS

History: The patient, ., was a white female, 23 years of age. In 1934, she had been in a tuberculosis sanitarium for five months, when cutaneous lesions appeared on the right arm, then spread to the back, and later to the face and neck. She had been admitted to the sanitarium in 1933 because of cervical adenopathy, chronic pharyngitis, and hoarseness. She remained in the sanitarium for one year. The Mantoux was said to have been positive, and the Wassermann reaction negative.

On admission to the University of Minnesota Hospitals in October, 1935, she was found to have a 4+ Kolmer, 2+ Klind, and positive Kahn reaction.

History and examination showed no evidence of syphilitic infection, but specific therapy was begun as a test. After two injections of neoarsphenamine, the hoarseness increased, and dyspnea developed, requiring a tracheotomy. There was some involution of the cutaneous lesions. The Kolmer was 2-, the Kline negative, and the Kahn positive. A course of twelve intramuscular injections of bismuth salicylate resulted in no further clinical improvement, but the serology became negative and has remained so. Six injections of neoarsphenamine have since been given with no visible effect.

#### Examination

There was an extensive papular and nodular eruption involving the right arm, the left cheek, the right eyelid, and the back. The lesions were yellowish brown in color, and varied in size from papules to large plaques. Many of the lesions were annular. There was a scar in the left cervical region resulting from drainage of infected lymph nodes. The patient breathes through a tracheotomy tube. Scars of healed lesions could be seen. Under diascopy the lesions did not disappear.

#### Laboratory

Mantoux (1-1000) negative, and 1-100 slightly positive.

Wassermann and Kline tests both 1 plus (Aug. 1936).

Roentgenogram of chest (1936) no evidence of tuberculosis.

Biopsies (1926 and 1935): Lupus Vulgaris.

- - - - -

#### V. GOSSIP

We add to the smart medical sayings of sophisticated kindergarteners this one. The school nurse was doing eye examinations and she had trouble with this child. The child noticing her difficulty casually remarked, "We consulted an oculist about my eyes. He used drops and told us that I was far-sighted in my right eye and had astigmatism in my

left, but that corrective lenses will probably not be necessary." When an English-born actor visited the Eustis Children's Hospital a few years ago, he was struck with a tie worn by Pediatrician Arild Hansen. It was around Christmastime, which meant nothing to the actor, who naturally assumed that Arild Hansen's tie represented his college colors--a good old-fashioned custom over home.....Today is Medical Technology Day at the Hospital with open house for parents, friends and faculty from 4:00 to 6:00. More than 300 reservations have been made for tonight's annual dinner, when honor students (B average) will be formally welcomed into the Orbs Honor Society and a good time will be had by all. Dr. Morris Fishbein, who was to have represented the parents, was unable to come because of illness....The Wetherbys announce the arrival of another young Scot, a son. Mac has been stepping high, wide and handsome all week long. Congratulations to both the Wetherbys and best wishes for the future.....Karl Anderson, one time Olympic hurdler and personal friend of the new King of England, warns us to dust off our superlatives for the Andersons will soon be in the headlines. When Karl met the King (before he was King), his "I'm Anderson from Minnesota" is still remembered by all.....The students who took the Post-graduate course in Roentgenologic Diagnosis were so pleased with their week that they sent a signed statement to President Coffman thanking him for the origin and the development of the idea of the Center for Continuation Study, assuring him that the personnel was tops and that the faculty under the direction of Roentgenologist Leo G. Rigler was the finest ever. They are ready, according to their statement, to come back for more work in this field in the near future, so that the idea of continuation study will be a reality for them.....This is Dermatology Day with Dermatologists Henry E. Michelson and Carl W. Laymon supplying the program. Few departments in our organization are so closely knit and cooperative. The dermatologists believe that a well-balanced division should feature good teaching, patient care, self-improvement, and scientific contributions. From the standpoint of well organized teaching,

their student clinics are arranged well in advance of the class hour with all the detail and finesse that one would use in arranging for a group of distinguished visitors. Departmental members do not become stale teaching one phase of the subject but are constantly rotated in order to preserve balance. Much credit is due to Henry Michelson for the development of this department and to his associates for furthering their plan of action....We are indebted to Dermatologist Francis Lynch for permission to use the following outline of "Suggestions for Writing Case Reports and Discussions." This is used by their department but could well be copied by all.

1. Initials of patient (for identification)
2. Aged 40, not 40 years old. Man (or boy) instead of male. Woman (or girl) instead of female.
3. History and all laboratory data in past tense. Description of eruption, etc. in present tense.
4. Make complete sentences. Avoid telegraphic style.
5. "A case for diagnosis" is form used. If possible add some suggestive diagnosis. If not possible add some descriptive words "ulcer of leg" "papular eruption of back", etc.
6. Cases of no scientific value or inadequately described or discussed should be mentioned only by title.
7. In rare cases, especially with no discussion but where all agree may add "all agreed with the diagnosis" or other similar words.
8. Names of diseases should follow "National Classified Nomenclature of Disease," for example, rosacea and not acne rosacea, seborrhoeic eczema and not seborrhoeic dermatitis, etc.
9. If differential blood counts, chemical examinations of blood or urinalyses are normal do not give unnecessary details.
10. Ending "ic" preferable in general to "ical", e.g. dermatologic, pathologic, etc.
11. Discussions should in general be confined to the case. Limit (to reasonable extent) your mention of other similar cases and didactic lectures on the disease in question.
12. Objectionable words or phrases:-  
 "There was no pathology." You might as well say there was no dermatology.  
 "Palms of the hands" is like saying teeth of the mouth. "Serology was negative" should be serological changes were negative. "To involute" is improper according to the best dictionaries. To undergo involution is the proper substitute, involute being a noun and not a verb. Histopathologic (or microscopic) examination showed is preferable to "biopsy showed."
13. Write roentgen rays and not Xrays, roentgenograms and not Xray picture, etc. Solid carbon dioxide and not carbon dioxide snow. Syphilis, not lues, syphilitic not luetic (hog latin).
14. "Examination revealed" is allowable but "showed" is equally good if not better. Please soft pedal the use of the word "disorder" for disease. Doctors rarely use it in speaking.
15. Proprietary drugs may be mentioned by name if accepted by Council on Pharmacy, etc. of A.M.A. Patent medicines may only be mentioned by name when unfavorable comment is made about them.