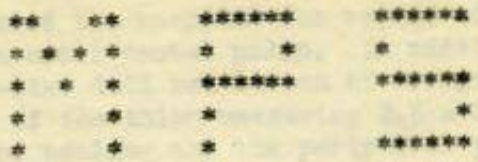

MICHIGAN PATHOLOGICAL SOCIETY

SEMINAR On DISEASES Of The SKIN

25 September 1952

Moderated By:

ELSON B. HELWIG, M.D.
Washington, D.C.

Statler Hotel
Detroit, Michigan

***

Case No. 1: Submitted by LAWRENCE WM. GARDNER, M.D.

The patient entered the hospital for repair of an inguinal hernia and removal of a small rectal polyp. In addition, there was a flat, nodular, plaque-like dull red lesion of irregular outline on the anterior aspect of the thigh measuring 2.5 x 2 cm. The center revealed areas of healing and the peripheral portions zones of crusting. In addition, there were a few single flat patches at the border of the main lesions separated by normal appearing skin. The entire lesion was excised.

***

Case No. 2: Submitted by WALTER A. STRYKER, M.D.

A 68 year old male had had a reddened area upon the prepuce for six months. The lesion apparently disappeared on occasion only to recur. There was no pain. A clear fluid occasionally exuded from the area. Physical examination revealed a slightly elevated shiny plaque on the prepuce in the region of the corona sulcus, extending onto the glans penis. Circumcision including and area of thickening of the mucosa that extended onto the glans penis was performed.

***

Case No. 3: Submitted by ROBERT J. FROST, M.D.

The material represented here is from a warty lesion encircling the anus of a 50 years of age, white male.

This lesion is known to have been present for at least eight years, having recurred following surgery at that time. The lesions, which are of a pearly, glistening character, are slow growing, and except for local itching, they are asymptomic. Careful examination has failed to reveal an associated carcinoma in this area.

***

Case No. 4: Submitted by LAWRENCE WM. GARDNER, M.D.

The patient had a raised cutaneous mass over the first lumbar vertebra for an eight month period, which had recently become ulcerated and infected. Examination disclosed an elevated, nodular papillary mass measuring 4.5 x 3 cm. raised 1.5 cm. above the surrounding tissue. The tumor was firm in consistency and somewhat scalloped on the external border. In the central portion, minute areas of ulceration were seen. Serial section revealed a yellowish-grey, firm substance unassociated with gross degenerative changes. The process did not extend into the underlying subcutaneous tissue.

Case No. 5: Submitted by OSBORNE A. BRIMES, M.D.

The patient, a 49 year old colored female came to the hospital because of bleeding from a mass in the left thigh. The mass had been present for 9 years and had increased in size in the last year. Physical examination revealed a 4 cm. irregular vascular mass fixed to skin on medial aspect of left thigh. A wide resection was done which included skin, superficial fascia and fascia lata.

The specimen is a roughly round portion of skin 9 cm. in diameter with subcutaneous and adipose tissue. Arising from the approximate center of the specimen is a nodular, firm, tan mass measuring 3 x 3 x 4 cm. On section it extends through all the subcutaneous tissue. It is encapsulated and measures 4 x 5 cm. on cross section. There are no nodes or masses in the adipose tissue. The tumor is whorled, slightly nodular and tan to red-tan. It strips of its capsule with ease.

***

Case No. 6: Submitted by IRA GORE, M.D.

The patient is a 35 year old white male who had a blue pigmented lesion of the left upper arm of unknown duration removed incidental to hernia repair.

Grossly, the lesion was excised with an elliptical shaped segment of skin measuring 2.5 x 1 cm. The underlying subcutaneous tissue was removed to a depth of 6 mm. Centrally on the skin surface there was a flat 5 mm. area of purple pigmentation. On bisecting the specimen this was found to lie deep in the dermis. The actual color was dark black.

***

Case No. 7: Submitted by H.J. LINN, M.D.

The patient is a 60 year old white male. A brown hairless macule over malar prominence has been present for 20 years. Increased in size during past 3 weeks. No bleeding or pain. Biopsied.

***

Case No. 8: Submitted by IRA GORE, M.D.

The patient is a 42 year old white male who had a small cystic and hyperkeratotic lesion on the skin overlying the left Achilles tendon. Clinically, the history states that this appeared following a local infection. The lesion was observed over a period of three months during which time it became elevated and cornified. It was removed with an elipse of surrounding skin. The lesion was raised, sharply circumscribed, pale, gray and firm.

Case No. 9: Submitted by HERMAN K. PINKUS, M.D.

The patient is a 21 year old female. She was in California in 1949. Shortly after returning developed dermatitis on legs, arms, lower back. X-ray of chest was negative, no other tests done. Was diagnosed in Dayton, Ohio by dermatologist as coccidiodomycosis. Lesion on back and arms cleared without treatment. Those on legs persisted. Now 3 years later, discrete infiltrated plaques, red with whitish atrophic centers. Not painful.

***

Case No. 10: Submitted by H.J. LINN, M.D.

Four year old male with small hard nodules on dorsum of hands for 1-2 weeks. Non-tender. Negative blood count, urine, and photoroentgen of chest. X-ray of hands negative.

***

Case No. 11: Submitted by J.A. KASPER, M.D.

Sixty-one year old white female complains of painful skin lesions, headache, fever and malaise. Onset, 2 weeks before admission to hospital, 4/30/52, was gradual.

On admission patient was apathetic and somewhat stuporous. Temperature was 102.4°F, fluctuating between 98.0 and 102.0°F. for about 5 days, afterwhich it remained normal for a week. Following biopsy the temperature rose again and is continuing at 98.0 to 102.0 at present (4 days).

The skin lesions consist of many bluish, warm, elevated maculopapular areas which appear indurated. These are on the extensor surfaces of the arms, forearms and legs.

Calcium, sodium and phosphorus are within normal limits. Alkaline phosphatase 4.3 units and acid phosphatase 2.2 units. Leukocytes 9400 to 12,500 with 82% PMN (11% N.F.) Eosinophils never above 4%.

***

Case No. 12: Submitted by HERMAN K. PINKUS, M.D.

Fifty-five year old female. Four years duration, right malar area indistinctly limited, asymptomatic, smooth. Plaque, brownish-red, 11 x 8 mm. in diameter. Slow growth, no ulceration. No systemic disease.

Case No. 13: Submitted by H. ASSELSTINE, M.D.

Baby boy D. This 1600 gm. new born male was born by Cesarian section for placenta previa. The child was completely covered by greatly thickened hard fissured skin. Many of the fissures were 1 cm. across. There was bilateral ectropian and marked deformity of the ears. Mouth and anus were gaping. Fingers were clawlike and ankylosed. The baby died on the fourth day.

The mother has had 2 normal children, one child similar to the present one and a spontaneous abortion.

***

Case No. 14: Submitted by A. JAMES FRENCH, M.D.

The patient was a 74 year old white male, native of Michigan, who had visited in South Carolina in 1950. He had had a "sliver" of wood in the skin of the dorsum of the left wrist at that time. The "sliver" wound healed but re-opened spontaneously in October, 1951, and enlarged until the entire verrucal lesion was excised in December, 1951. A culture was not obtained. Examination of the patient in January, 1952 indicated that the entire lesion had been excised and no recurrence was found.

***

Case No. 15: Submitted by HERMAN K. PINKUS, M.D.

R.T., 33 year old male. Known of vesicles and bullae with crusting on neck for 15 years. Sister is M.J., 39 year female. For many years eruption on scalp, axillae, perineum. In axillae looks like chronic infectious eczematoid dermatitis.

DIAGNOSES SUBMITTED

Case No.

1: _____

2: _____

3: _____

4: _____

5: _____

6: _____

7: _____

8: _____

9: _____

10: _____

11: _____

12: _____

13: _____

14: _____

15: _____

PLEASE RETURN TO: E.R. JENNINGS, M.D.
Receiving Hospital
Detroit 26, Michigan

SEMINAR ON DISEASES OF THE SKIN

MICHIGAN PATHOLOGIC SOCIETY

conducted at

DETROIT, MICHIGAN

SEPTEMBER 25, 1952

by

DR. ELSON B. HELWIG

ARMED FORCES INSTITUTE OF PATHOLOGY

WASHINGTON, D. C.

3740

CASE 1

BOWEN'S DISEASE

Usually an annular or serpiginous solitary scaley dull red plaque. The growth is slow (5-35 years) and most common on the glabrous skin. Occasionally there are multiple plaques and sometimes central involution.

The histopathologic picture shows hyperkeratosis but particularly surface scales of few or many parakeratotic cells accompanied by a diminished granular cell layer of the epidermis.

The epidermis exhibits acanthosis with enlarged, distorted and irregular rete pegs and disoriented cells with disturbed normal progressive layers of epidermal maturation.

Within the epidermis there are scattered abnormal individual keratinized cells, numerous mitotic figures at all depths, multinucleated cells with "clumping" of the nuclei and scattered vacuolated epithelial cells.

There are dilated capillaries and inflammatory cell infiltration, chiefly lymphocytes, in the upper corium. Some lesions eventually develop into a squamous cell carcinoma but the percentage is controversial.

Individual histologic changes observed in Bowen's disease may occur in senile keratosis, arsenical keratosis and radiation keratosis, sometimes necessitating both the gross (clinical) and histologic picture for exact diagnosis.

Clinically, Bowen's disease may be confused with psoriasis and superficial epitheliomatosis (multicentric superficial basal cell carcinoma).

References

Bowen, J. T.: Precancerous Dermatoses, J. Cut. Dis. 30: 241-255, 1912

Stout, A. P.: Malignant Manifestations of Bowen's Disease, New York State J. Med. 39: 801-809, 1939.

CASE 2

ERYTHROPLASIA OF QUEYRAT

The section shows elongation and widening of the rete ridges accompanied by elongation and narrowing of the connective tissue papillae. The normal zones of the epidermis are indistinct with loss of the granular layer and the presence of plaques of parakeratosis (it is probable that most of the parakeratotic plaques have been rubbed off.) The cells throughout the epidermis are similar; oval in shape, poorly outlined and possess relatively large hyperchromatic round or oval nuclei. Mitotic figures are present at all depths. Occasional cells show a vacuolated cytoplasm. Only a rare focus of keratinized cells within the epidermis is observed. In the corium and principally in the papillary zone there is an infiltration of plasma cells, lymphocytes and monocytes. The capillaries and venules are dilated and hyperemic.

The changes in the present section are those of a precancerous lesion and so were those in Queyrat's original case. Nevertheless some authorities believe the process is not precancerous but perhaps are talking about some other type of lesion. Histologically the lesion is similar in many respects to Bowen's disease but lacks the individual keratinized cells and multinucleated cells.

Similar lesions may occur on the vulva and on the buccal mucosa.

References

Queyrat, L.: Erythroplasie du gland, Bull. Soc. Franc de Derm. et Syph. 22: 378-382, 1911

Sulzberger, M. B., and Satenstein, D. L.: Erythroplasia of Queyrat, Arch. Derm. & Syph. 28: 798-806, 1933

Stiles, F., Jr.: Erythroplasia of the Glans Penis (Queyrat), Arch. Derm. & Syph. 30: 647-650, 1934

CASE 3

EXTRAMAMMARY PAGET'S DISEASE

Most common in the axillary, genital and perianal regions. Grossly characterized by an eczematous, red, sometimes weeping, excoriated, scaley or lichenified surface.

Histologically distinctive large pale staining pleomorphic cells sometimes with a vacuolated cytoplasm and relatively large pale nuclei (Paget cells) are present. The Paget cells appear discrete from and paler than the epidermal cells. They occur singly or in small groups without intercellular bridges and in some instances appear to compress the adjacent epidermal cells or to be free in a space. The Paget cells, when few in number, are usually more numerous in the lower epidermis and may involve particularly the outer layers of hair follicles and sweat ducts.

Otherwise the epidermis exhibits various grades of acanthosis, hyperkeratosis and a distinct granular cell layer.

In contrast to Bowen's disease and carcinoma in situ, dyskeratotic cells and multinucleated epidermal giant cells are absent.

The corium shows a nonspecific inflammatory infiltrate and hyperemia.

Paget's disease must be differentiated from Bowen's disease, amelanotic malignant melanoma, metastatic carcinoma, and intraepidermal epithelioma of Jadassohn.

References

Weiner, H. A.: Paget's Disease of the Skin and its Relation to Carcinoma of the Apocrine Sweat Glands, Am. J. Cancer. 31: 373-403, 1937.

Pinkus, H., and Gould, S. E.: Extramammary Paget's Disease and Intraepidermal Carcinoma. Arch. Derm. & Syph. 39: 479-502, 1939.

Foraker, A. G. and Miller, C. J.: Extramammary Paget's Disease of the Perianal Skin, Cancer 2: 144-152, 1949.

CASE 4

BASAL CELL CARCINOMA

The section shows a basal cell carcinoma of the adenoid cystic type. It is comprised of basal-like cells often arranged in an adenoid or ribbony pattern. These are occasional delicate supporting cores of connective tissue and cappillaries traversing the tumor, but many fields are entirely epithelial. In some places cells are separated by tenuous blue staining material (some authorities interpret this change as secretion) and other cells are associated with minute masses of pink staining hyaline material.

Although the present tumor runs to a single adenoid cystic type, it is not uncommon to see this type of tumor mixed with one which shows solid foci as well as the so-called pilar structures. The adenoid cystic variety is often elevated and sessile and in general shows little tendency to infiltrate the corium and subcutaneous tissue.

This tumor is not to be confused with the clinical and pathologic entity of "Epithelioma Adenoides Cysticum" described by Brooke.

References

Brooke, H. G.: Epithelioma Adenoides Cysticum. Brit. J. Derm., 4: 269-286, 1928

Foot, N. C.: Adnexal Carcinoma of the Skin. Am. J. Path. 23: 1-27, 1947.

Krompecker, E.: Der Basalzellenkrebs. G. Fisher, Jena, 1903.

Lennox, B. and Wells, A. L.: Differentiation in the Rodent Ulcer Group of Tumours, British J. of Cancer, 5: 195, 1951.

Lever, W.: Pathogenesis of Benign Tumors of Cutaneous Appendages and of Basal Cell Epithelioma. Arch. Derm. and Syph. 57: 679-724, 1948.

Montgomery, H.: Histogenesis of Basal Cell Epithelioma. Radiology, 25: 8-23, 1935.

Telch, H. A. and Wheelock, M. D.: Histogenesis of Basal Cell Carcinoma, Arch. Path., 48: 447-461, 1949.

CASE 5

DERMATOFIBROSARCOMA PROTUBERANS

Asymptomatic, slowly progressive, reddish-blue, flat growths of the cutis and subcutis which develop, sometimes rapidly, into large projecting nodular and pedunculated, occasionally ulcerated, gray or red firm masses. Most common on trunk and thorax but may occur on head, neck and extremities.

Histologically the picture ranges from short bands of uniform spindle-shaped cells which irregularly interlace to spindle-shaped cells which fan out from a central point or capillary like a cart-wheel. The cells are usually accompanied by a fibrillar stroma. In addition to irregular, sometimes numerous, vascular channels there are scattered well formed vessels present. The margins of the lesion generally are indefinite and marked by an intermingling of fat tissue cells and tumor. Peripherally the tumor usually shows a well developed collagenous stroma. This is in contrast to fascial fibrosarcomas which tend to push the fat aside and show less differentiation peripherally. Occasionally myxomatous-like change occurs within tumors of this type.

In contrast to fibrosarcoma these lesions rarely metastasize although recurrence is not uncommon.

The dermatofibrosarcoma protuberans(possibly a misnomer) and dermatofibroma are probably closely related.

References

Binkley, G.: Dermatofibrosarcoma Protuberans, Arch. of Derm. and Syph., 40: 578-592, 1939.

Mopper, C. and Pinkus, H.: Dermatofibrosarcoma Protuberans. Am. J. Clin. Path. 20: 171-176, 1950

Pack, G. T. and Tabah, E. J: Dermatofibrosarcoma Protuberans. A. M. A. Arch. of Surgery, 62: 391-411, 1951

CASE 6

BLUE NEVUS

Blue-black, blue or gray, flat or hemispherical, indurated cutaneous papules.

Histologically the epidermis may show no change or a variable amount of acanthosis and either an increase or decrease in melanin pigmentation. The blue nevus is comprised of spindle-shaped melanoblasts which separate the normal collagen bundles of the corium. The cells sometimes grow in irregular clumps and often infiltrate about the sweat gland structures, but this latter appearance is not an indication of malignant changes. The greatest number of melanoblasts is usually in the deep cutis although sometimes the reverse is true. Occasionally a blue nevus is combined with an intradermal nevus. In other variations the blue nevus is extraordinarily cellular in forming the so-called "cellular blue nevus" and relatively accelular in melanoblasts when it may be mistaken for a fibroma or neurofibroma. The blue nevus must also be differentiated from the dermatofibroma and malignant melanoma.

References

Ackerman, L. and Rogato, J. del.: Cancer Diagnosis, Treatment and Prognosis, Ed. 1, St. Louis. 1947. C. V. Mosby Co., p 170

Masson, P.: Neuro-nevi "blue". Arch. "de Vechi" per anat. pat. e Med. Clin. 14: p. 1-28, 1950

CASE 7

SENILE KERATOSIS

Over a considerable segment of the skin the epidermis and to some degree the adnexal structures are atrophic. In one area there is parakeratosis associated with an absent granular cell layer. The normal rete ridges are absent, but irregular ridges of atypical acanthotic epidermis bulge into the underlying corium. Sometimes the basal cells are separated from the remaining epidermis by a cystic space possibly due to edema. Within the enlarged irregular ridges the epithelial cells tend to be disoriented and there are large pleomorphic occasionally multinucleated cells--not many but definitely present. Nowhere do the cells of the epidermal ridges actually invade the corium.

In some places, particularly the basal row of cells, there is exhibited a rather dense melanin pigmentation. This is not a rare occurrence in association with senile keratosis especially at the margins of the lesion. Why the pigmentation occurs is not known, but the change may be related to lentigo senilis. It is not to be confused with junctional nevus in which distinct nests of nevus cells occur.

The corium shows degeneration of the elastic tissue and mild chronic inflammation.

The senile keratosis is a precancerous lesion which must be differentiated from seborrheic keratosis(verruca senilis), a non-precancerous one, and from senile lentigines.

References

Caro, M. R. and Szymanski, F. J.: Seborrheic and Senile Keratoses, Med. Clinics of N. Am. 35: 1-13, 1951

Cawley, E. P. and Curtis, A. F.: Lentigo Senilis, Arch. of Derm. & Syph. 62: 635-641, 1950

CASE 8

VERRUCA VULGARIS

The section of skin shows a pointed papillary growth of the epidermis with a depressed cup-shaped base. Although this is a common configuration of the verruca vulgaris, the lesion is known under several terms according to the location and shape (e.g., verruca digitata and verruca plantaris).

Histologically there is marked acanthosis, hyperkeratosis and parakeratosis which may appear as a single papillary projection or as a series of projections with connective cores radiating in a fan shape from the base. Vacuolization may be prominent in the prickle cell layer. Basophilic and acidophilic irregularly shaped cytoplasmic masses occur in the upper prickle cell zone and sometimes intranuclear inclusions. Above this area the cells become acidophilic except for small blue nuclei and form a peculiar type of parakeratosis.

Inflammatory infiltrate due to secondary infection may be present at the base.

Verruca plana juvenilis must be distinguished from lichen planus, epithelial nevus, and epidermodysplasia verruciformis. Molluscum contagiosum is located within the corium and the molluscum bodies are diagnostic.

The characteristic and readily diagnosed verruca vulgaris is most common on the feet and hands and in young people. In older people and elsewhere on the body it may occur as a papillary or flat growth in which the cell inclusions are indistinct or absent which renders diagnosis difficult.

References

Strauss, M. J. and Bunting, H.: Virus-like Particles and Inclusion Bodies in Skin Papillomas, J. of Investigative Derm. 15: 433-443, 1950

CASE 9

NECROBIOSIS LIPOIDICA DIABETICORUM

Clinically necrobiosis lipoidica diabeticorum is characterized by multiple early papules and older yellow and violaceous plaques mostly on the extremities of diabetic(90%) patients. The lesion may occur before the onset of the symptoms of diabetes mellitus.

Histologically the essential change is in the corium. The collagen fibers show poorly demarcated foci of degeneration and homogenization(necrobiosis). Elastic fibers are absent within the necrobiotic foci. Surrounding the areas of collagen alteration, there is a reaction of the connective tissue cells, but this is seldome so sharply defined as in granuloma annulare. These are also inflammatory cells consisting of lymphocytes, a few plasma cells, monocytes, and rare polymorphonuclear leukocytes. Arterioles and capillaries surrounded by exudate show swollen endothelial cells and thickening. In some cases complete obliteration occurs.

The degenerated collagen shows a finely vacuolated appearance. Lipoids may be demonstrated extracellularly in association with the areas of degenerated collagen, and this demonstration aids in differentiating the lesion from granuloma annulare. In some examples a fairly marked foreign body giant cell reaction occurs.

The lesion must be distinguished from granuloma annulare, sarcoid, amyloidosis, erythema induratum and chemical(beryllium) granuloma.

References

Helwig, E. B.: Chemical(Deryllium) Granulomas of Skin, The Military Surgeon, 109: 540-558, 1951

Laymon, C. W. and Fisher, I.: Necrobiosis Lipoidica(Diabeticorum) Arch. of Derm. & Syph. 59: 150-164, 1949

CASE 10

GRANULOMA ANNULARE

Granuloma annulare is characterized by an elevated nodule or group of nodules occurring most frequently in the skin of the dorsum of the fingers, hands, feet, ankles, wrists, buttock and neck.

Histologically the corium in a well developed lesion shows areas of necrobiosis surrounded by connective tissue cells often arranged in palisade fashion. The palisaded layer of cells is continuous with connective tissue irregularly oriented. In early lesions there may be little or no necrobiosis and only fibroblastic and inflammatory cell reaction.

A few lymphocytes and rare polymorphonuclear leukocytes are present, particularly in the perivascular areas of the arterioles. Some of the arterioles show fairly marked thickening whereas others show little change. Some lesions with mucicarmine stains show the presence of mucin in the connective tissue in the region of the areas of necrosis. It is claimed that this observation is of value in differentiating granuloma annulare from necrobiosis lipoidica diabeticorium. The changes are similar to those observed in a rheumatoid nodule, but the latter is usually in the subcutis or deeper.

Reference

Prunty, F. C. and Montgomery, H.: Granuloma Annulare, Clinical and Pathological Study, Arch. Derm. and Syph. 46: 394, 1942.

CASE 11

ERYTHEMA NODOSUM

The histologic changes are confined chiefly to the deeper cutis and the subcutis. The connective tissue septa of the subcutis are thickened by fibroblastic proliferation accompanied by infiltration of inflammatory cells including many lymphocytes, polymorphonuclear leukocytes, histiocytes and multinucleated foreign body giant cells. The latter commonly encompasses pink cellular material or vacuoles. The margins of the septa and the included lobules of fat show many fat cells replaced by phagocytic histiocytes among the fat cells. Small arteries and in particular arterioles show thickening and endothelial proliferation. In some places within the interlobular septa there appears to be necrosis of collagen.

Histologically erythema nodosum is to be differentiated from erythema induratum by the presence of a tuberculous reaction in the latter disease. The microscopic picture in erythema nodosum, nodular non-suppurative panniculitis (Weber-Christian Disease), and nodular vasculitis is essentially similar.

References

Montgomery, H., O'Leary, P. A., and Barker, N. W.: Nodular Vascular Diseases of the Legs, Erythema Induratum and Allied Conditions. 128: 335, 1945

Humphrey, J. H. and Pagel, W.: The Tissue Response to Heat-Killed Streptococci in the Skin of Normal Subjects, and in Persons with Rheumatic Fever, Rheumatoid Arthritis, Subacute Bacterial Endocarditis and Erythema Nodosum, Brit. J. of Experimental Path., 282-288, 1949

French, A. J.: Hypersensitivity in the Pathogenesis of the Histopathologic Changes Associated with Sulfonamide Chemotherapy, Amer. J. of Path. 22: 679-701, 1946

CASE 12

GRANULOMA FACIALE

Histologic examination of the skin shows an essentially normal epidermis beneath which is a narrow plate of normal corium. Beneath this normal zone and centered in the midcorium, extending to the subcutis, is an inflammatory infiltrate which causes a mild thickening of the corium. The inflammatory cells consist of polymorphonuclear leukocytes (some eosinophilic), lymphocytes, monocytes, plasma cells and histiocytes. The distribution is irregular and not uniform and sometimes there are minute clusters of one cell type. A few Russel cells are noted and are considered to be nonspecific. Neutrophilic leukocytes are sometimes but not always disposed in perivascular collars and this is best observed around the dilated capillaries away from the main exudate. Many of the capillaries and arterioles exhibit only dilatation and swollen endothelium without appreciable thickening. In a few instances the wall of the vessel shows pink staining hyaline material which extends into the perivascular area.

This lesion also has been called eosinophilic granuloma, a nonspecific term which is confusing with the other so-called eosinophilic granulomas of skin and other organs.

Granuloma faciale is to be differentiated from insect bite and reticulohistiocytoma.

The present section also contains a small intradermal nevus.

References

Zac, F. G.: Reticulohistiocytoma ("Ganglioneuroma") of the Skin British J. of Derm. & Syph. 62: 351-355, 1950

Buley, H. M.: Eosinophil Granuloma of the Skin, J. Invest. Derm. 7: 291,1946

Cobane, J. H., Straith, C. L. and Finkus, H.: Facial Granulomas with Eosinophilia, Arch. of Derm. & Syph. 61: 442-454, 1950

CASE 13

CONGENITAL ICHTHYOSIS

The section of fetal skin shows massive hyperkeratosis associated with hypertrophy and papillary formation of the epidermis. Rete ridges tend to be elongated and the openings of the pilosebaceous apparatuses are widened and filled with horny material. The epidermis is clearly differentiated into the usual layers including a well defined stratum granulosum (some authorities say a well defined stratum granulosum is present only on the scalp). Sebaceous glands, sweat glands and hair follicles are present and show no abnormalities other than can be accounted for by the hyperkeratotic encasement.

The hairs are encompassed in horny material which suggests that both are propelled outward together and are somewhat tangled near the surface. The connective tissue papillae of the corium are elongated and contain dilated capillaries. Focally the stroma in the corium is quite cellular but there is no appreciable inflammatory cell infiltration.

The center of the section includes a fissure where the epidermis is relatively thin. The underlying capillaries do not exhibit as much hyperemia as is usually observed at the site of a fissure.

This type of congenital ichthyosis is the most severe. Other less severe types have been designated as the mild and the late types of congenital ichthyosis and ichthyosis simplex.

Some examples of ichthyosis must be differentiated from epithelial nevi (epithelial hamartomas) and from keratosis pilaris.

References

Edmonds, H. W. and Dolan, W. D.: Ichthyosis Congenita Fetalis, Severe Type (Harlequin Fetus) The Bulletin of the International Association of Med. Museums, 32: 1-21, 1951

CASE 14

CHROMOBLASTOMYCOSIS

The epidermis of the skin shows noticeable acanthosis with irregular proliferation of the rete ridges into the corium and on the surface hyperkeratosis and parakeratosis. Beneath the acanthotic epithelium the corium is thickened by stromal proliferation within which there is an inflammatory infiltrate. There is a diffuse infiltration of granular leukocytes, lymphocytes and plasma cells as well as focal abscesses of leukocytes and occasionally multinucleated giant cells. Within some of the abscesses there are chromatic cells of a fungus like those chromoblastomycosis.

As a general rule in the mycotic granulomas, even if the organisms are so scarce as to escape immediate detection, the presence of suppurative or granulomatous inflammation and extensive acanthosis or pseudo-epitheliomatous hyperplasia always appears as squamous hyperplasia except occasionally about hair follicles where the appearance is more basal in type.

Pseudo-epitheliomatous hyperplasia may be produced by many different agents. Examples are mycotic granulomas, granuloma inguinale, bromide granulomas, foreign bodies and epidermal inclusions.

Chromoblastomycosis is caused by three different fungi and may be nodular, verrucous, psoriasiform and cicatricial. Histologically the picture is granulomatous. Miliary abscesses are common but miliary granulomas and varying degrees of fibrous may occur. The brown or black crescent shaped and rounded bodies, singly or in clusters are characteristic.

References

Binford, C. H., Hess, G. and Emmons, C. W.: Chromoblastomycosis, Arch. Derm. & Syph. 49, 398-402, 1944

Weidman, F. D. and Rosenthal, L. H.: Chromoblastomycosis: A New and Important Blastomycosis in North America; Report of a Case in Philadelphia, Arch. Derm. & Syph. 43: 62, 1941

Pardo-Castello, V.: Rio Leon, E., and Trespalacios, F.: Chromoblastomycosis in Cuba, Arch. Derm. & Syph. 45: 19, 1942

CASE 15

FAMILIAL BENIGN CHRONIC PEMPHIGUS

A frequently familial bullous and vesicular dermatitis involving mostly the neck, axillae and flexors.

The section of the skin is characterized by the presence of fissuring lacunae or bullae within the epidermis accompanied by a mild inflammatory reaction. The bullae commonly involves an appreciable patch of the epidermis. Both the base and roof of the bullae are formed by the epidermis with the roof sometimes being ruptured and covered with a crust of serum and leukocytes. The base is covered by one or more layers of epithelial cells arranged in exaggerated or enlarged rete ridges which extend into the corium producing a villous pattern. Connective tissue papillae support and separate the abnormal rete ridges. These papillae together with the immediate corium frequently are edematous, mildly congestd and infiltrated with inflammatory cells including lymphocytes, plasma cells and polymorphonuclear leukocytes (some eosinophilic). The hair follicles in the involved areas may show atrophy.

Some of the epithelial cells of the margins of the bullae show acantholysis, either singly or in small groups, and occasionally cells become shrunken. There is little or no tendency to the formation of large "keratinized" cells(corps ronds) as seen in Darier's Disease. A few inflammatory cells may be present in the bullae and the contiguous epithelium.

Familial benign chronic pemphigus and keratosis follicularis are considered by some to be variants of a single disease and by others as separate processes. Likewise some consider familial benign chronic pemphigus to be a variety of pemphigus.

Senile keratosis and squamous cell carcinomas may also show lacunae formation histologically and must be differentiated from familial benign chronic pemphigus.

References

Frank, S. B. and Rein, C. R.: Dyskeratoid Dermatosis., Arch. Derm. and Syph., 45: 129, 1942.

Hailey, H. and Hailey, H.: Familial Benign Chronic Pemphigus, 39: 679-685, 1939.

Lever, W. F.; Pemphigus, A. M. A. Arch. Derm. and Syph. 64: 727-753, 1951.

Pels, I. R. and Goodman, M. H.: Criteria for the Histologic Diagnosis of Keratosis Follicularis(Darier), 39: 438-455, 1939.