

calls for commitment to a State hospital of any person who is found to be "so far addicted to the intemperate use of stimulants as to have lost the power of self-control, or if subject to dipsomania or inebriety." Such commitment is for a definite period, not to exceed two years, but the person may be paroled by the medical superintendent. The benefit thus derived is due to (1) physical improvement; (2) separation from the environment which has been a factor in the drinking; (3) the bracing effect of discipline and routine; and (4) protection from alcohol over a considerable period of time.

However, the alcoholic's basic difficulty is not alcohol, but emotional immaturity, and treatment, in order to be effective, must be built upon this principle. The growing-up process in the alcoholic is accomplished through the close personal relationship that is established between him and his physician, and the gradual interpretation of this relationship, as it shifts with his various emotional strivings, both positive and negative, and as it changes with his emotional development. To the present time we have found no other way to accomplish this. Present treatment requires much time per patient. Treatment interviews are usually for a period of one hour, three to six times a week. A physician devoting all his time to such treatment can care for from only eight to twelve patients. Since the State hospital physician has charge of from two hundred to four hundred patients, it is obvious he does not have the time necessary to carry out such treatment with more than a few of the alcoholics who are committed.

From a practical point of view the proper treatment of alcoholism is expensive. Consequently, the majority of alcoholics are left without adequate treatment, and the problem as a whole remains relatively unsolved. The problem appears to be increasing, and of its own weight will possibly force some action toward a solution. It appears from the work of Durfee that segregation of alcoholics to a "farm," where they are treated in small groups of ten or twelve, has certain advantages. The disciplinary action of the group is stressed, and it appears to substitute in part for the close personal relationship of physician and patient. If this is true, it would, to that extent, either shorten the treatment or free the physician's time so that he could treat more patients. It is obvious, of course, that prophylaxis is the most desirable and, if possible, would be the most economical and efficient method of dealing with this problem. This, however, would involve the possession of a knowledge of personality structure and development by every parent. There is probably no more complex pattern in the universe, and certainly no one with as many variable possibilities as the human personality. Such knowledge, therefore, cannot be within the grasp of the general public.

For the time being, we must proceed with what methods we have available; and as our knowledge and experience grow, better and perhaps shorter methods of treatment will become apparent. As physicians, we have for centuries dealt with the mild personality pathology which always accompa-

nies physical pathology. The family physician of the past generation endeared himself to his patients through his intuitive understanding and skillful handling of their personality needs during times of distress as well as through his medical therapy. Times change. Our therapy has become more specialized and our knowledge more formalized. Despite this, the human being continues to function as an inseparable unit; and since our task is to correct, alleviate or prevent pathology, the treatment of psychopathology—of which the treatment of alcoholism is a part—becomes the concern of medicine.

Compton Sanitarium.

MALIGNANT MELANOMA: A STATISTICAL AND PATHOLOGICAL REVIEW OF THIRTY-FIVE CASES*

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THIS article is a review of thirty-five cases of malignant melanoma studied in the departments of dermatology and pathology of the University of California Medical School. We have reviewed the case histories statistically, and studied in some detail the histories and histologic picture of those who have survived five years or longer after treatment.

CLASSIFICATION

In the earlier literature and in some of the recent writings, the malignant neoplasms arising from nevus cells were designated as melanosarcoma, melanocarcinoma, etc., or as nevocarcinoma, nevosarcoma, etc. This subdivision is based on purely morphologic grounds, and has no connection with the origin of the cells or their clinical course. It has not been shown that any of these types is more amenable to treatment or less malignant in its course. In most of the recent literature the term "malignant melanoma" or just melanoma has been used for the malignant neoplasms, while the benign pigmented lesions are called benign melanomas or pigmented nevi. The origin of nevus cells is still uncertain in spite of the very considerable amount of research that has been done. The majority of investigators believe, with Masson, that they are mesoblastic in origin, arising from the Schwann cells of the neurolemma. In the wild growth that occurs when malignant changes develop, these cells may differentiate toward epithelial, endothelial or connective tissue cells with varying degrees of pigment formation. Different appearing types of cells may be seen in the original growth, and also in the metastatic lesions. Thus one area may be properly called melanosarcoma while another portion may be melano-endothelioma. The term "malignant melanoma" covers all these

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Statistical Analysis of 35 Cases of Malignant Melanoma

Case	Sex	Age	Location	Duration at Entry	Treatment	Status
1. L. A.	F.	24	Right wrist with metastatic nodules on arm	Two years, September, 1934	Excision and x-ray	Dead, March, 1936
2. F. A.	F.	38	Center of chest	One year, May, 1933	Excision and x-ray	Dead, March, 1934
3. W. A.	F.	...	Malar prominence	One year, September, 1933	Desiccation	Well, September, 1938
4. N. B.	M.	52	Under left jaw with metastases	Three years, May, 1935	Radium, x-ray	Dead, 1936
5. M. B.	F.	72	Right cheek	One year, October, 1932	Desiccation, radium, excision	Well, January, 1939
6. C. B.	F.	...	Sclera	Fifteen years, October, 1927	Radium, excision, desiccation	Dead, 1929
7. F. B.	F.	17	Forehead	Years, November, 1931	Desiccation	Unknown
8. R. C.	M.	48	Back with metastases	One year, May, 1938	Excision, x-ray	Dead, November, 1938
9. F. C.	M.	51	Back with metastases	Five years, May, 1934	Excision, x-ray	Living, May, 1938, with metastases
10. C. D.	M.	50	Fourth finger right hand with metastases	Two years, June, 1935	Amputation, x-ray	Dead, December, 1935
11. R. F.	F.	79	Right sole	Five years, June, 1930	Desiccation	Dead, Last seen April, 1935. No recurrence
12. V. G.	F.	61	Left temple	Two months, October, 1938	Desiccation	Well, February, 1939
13. M. H.	F.	42	Left chest with metastases	Seven years, October, 1932	Desiccation	Dead
14. R. J.	M.	40	Shoulder	?, October, 1932	Desiccation, Coffey-Humber	Dead, February, 1934
15. J. K.	M.	38	Multiple nodes	Seven years, February, 1936	X-ray	Unknown
16. M. L.	F.	61	Scalp	Few weeks, August, 1929	Desiccation	Unknown
17. O. M.	M.	33	Breast	?, December, 1930	Excision	Unknown
18. J. M.	M.	86	Right cheek	Three months, June, 1932	Desiccation	Dead
19. D. M.	F.	60	Right wrist	Years, October, 1933	Desiccation	Well, April, 1929
20. H. M.	M.	64	Left thigh, node in femoral region	Five months, May, 1933	Cautery	Dead
21. M. N.	F.	23	Lower leg	Seven months, May, 1935	Desiccation, Coffey-Humber	Living with metastases, April, 1939
22. C. P.	F.	43	Right middle toe	Three months, September, 1937	Desiccation	Well, April, 1939
23. H. P.	F.	29	Left cheek	Three weeks, April, 1931	Desiccation	Well, April, 1939
24. E. R.	M.	5	Right lower leg	Five years, October, 1932	Desiccation	Well, December, 1938
25. J. R.	M.	30	Left ear with metastases	Two years, January, 1937	X-ray	Unknown
26. S. E. S.	F.	83	Left cheek	?, January, 1932	Desiccation	Unknown
27. S. S.	F.	...	Left cheek	Eight years, January, 1933	Desiccation	Well, September, 1938
28. L. S.	M.	66	Right heel with metastases	Six months, June, 1938	None	Hopeless
29. F. S.	M.	69	Face	?, July, 1934	Desiccation	Dead
30. M. V.	F.	74	Left heel	Fifteen years, June, 1936	X-ray	Unknown
31. W. C.	M.	12	Above right popliteal	Two years, March, 1932	Excision	Well, April, 1939
32. J. M.	F.	61	Right cheek	One year, August, 1931	Excision; recurrence excised May, 1937	Well, April, 1939
33. S. N.	M.	59	Left thigh	Four months, August, 1934	Excision	Unknown
34. A. S.	F.	41	Right cheek	Five years, December, 1930	Excision	Unknown
35. S. M.	M.	50	Sclera	Five years, January, 1934	Enucleation	Dead, April, 1934

Sixteen males; nineteen females. Average age: 48.7 years. Where number of years are not designated, the information is unknown.

variations in morphology, and is a satisfactory classification for all practical purposes.

CLINICAL FINDINGS

From the clinical standpoint it is to be noted that many malignant melanomas develop from a pre-existing pigmented nevus which has been present for many years or since birth. Some of the malignant melanomata arise on apparently normal skin. This may be explained on the basis of the failure of the patient to notice a relatively insignificant pigmented spot or on the presence of a congenital cell rest which remains quiescent until the proper set of circumstances arise to stimulate them to active growth. It should be pointed out here that actual trauma is not always noted, and probably some other factors may start the actual growth. The type of nevus which is most apt to undergo malignant changes is the smooth, flat, blue-black lesion either level with the normal skin or slightly raised. It is doubtful if the warty or hairy nevi ever become malignant.

TREATMENT

The impression that has been given by many authors of the danger of removing the ordinary type of warty or hairy mole by the use of the cautery, superficial electrodesiccation, acid cautery or electrolysis is certainly erroneous. If the smooth, blue-black nevus is to be treated at all, it should be completely excised by wide surgical excision or destroyed by thorough electrodesiccation. If the lesion is located so that it is not exposed to trauma, one may properly elect to let it alone, with the warning to the patient that if at any future time it starts to increase in size, immediate removal is indicated.

COMMENT ON CASES REPORTED

In the accompanying table there is a statistical analysis of the essential available facts in thirty-five cases of malignant melanoma. In every instance the diagnosis was verified by microscopic examination of sections. Of the cases listed, nineteen occurred in females and sixteen in males. The average age at the time of the first visit was 48.7 years. The youngest patient was five years old and the oldest, eighty-six. Twelve of the patients were lost track of, and eleven are known to be dead. Two of the patients are living, but present clinical evidence of metastases. The treatment used in those cases in which it was thought that there was a reasonable chance of cure was either wide surgical excision or electrodesiccation. When the latter was used, the attempt was to destroy tissue well beyond the limits of the growth. X-ray was used as a palliative measure in some of the extensive and hopeless cases or as a prophylactic to neighboring lymph groups. There were no patients in this small series in whom radiation was used alone and, therefore, no interpretation can be made as to its value.

Of the thirty-five cases reviewed, seven patients are known to be alive and well five years or longer after treatment, presenting no evidence of neoplastic disease. While we are aware of the fact that recurrences may yet develop in some of these cases, their outlook is relatively good.

REPORT OF CASES

The following is a brief synopsis of the histories of the apparently cured patients:

CASE 3.—W. A., female, in September, 1933, presented a melanoma on the malar prominence, about two centimeters in diameter, growing for the past year. It was destroyed by electrodesiccation. The patient was well in September, 1938.

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CASE 5.—M. B., female, 72 years old, in October, 1932, presented a nodular black lesion about 1 by 2 centimeters on the right cheek. The lesion had been growing for about one year. The patient had been treated from time to time for the previous fifteen years for a diffuse mottled pigmentation of the cheek. She had not been seen for the past six years. The lesion was destroyed by electrodesiccation. In March, 1933, a subcutaneous nodule appeared under the scar. Gold seeds of radon were buried in the growth with no benefit. In June, 1933, the mass was excised surgically and was also shown to be a malignant melanoma microscopically. The patient was well in January, 1939.

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CASE 19.—D. M., female, 60 years old, in October, 1933, presented a black mole on the back of her left wrist. There was a spreading areola of pigment and it was destroyed by electrodesiccation. The patient was well in April, 1939.

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CASE 23.—H. P., female, 29 years old, in April, 1931, presented a pea-sized, hemispherical black nodule over the left zygoma. It had first appeared three weeks previously at the side of a bean-sized area of pigmentation which had been present for many years. It was destroyed by electrodesiccation and the patient was well in April, 1939.

‘ ‘ ‘

CASE 24.—E. R., male, five years old, in October, 1932, presented a firm purplish lesion about one centimeter in diameter, and slightly raised, on the outer aspect of the right lower leg. It had been present since infancy and was growing slowly. It was treated by electrodesiccation, and the patient was well in December, 1938.

‘ ‘ ‘

CASE 27.—S. S., female, in January, 1933, presented a blue-black mole on the left cheek, about three-fourths centimeter in diameter and slightly raised, above the level of the skin. It had been growing slowly for the past eight years. A biopsy was done, and the growth was destroyed by electrodesiccation. The patient was well in September, 1938.

‘ ‘ ‘

CASE 31.—W. C., male, 12 years old, in April, 1932, presented a pigmented area about 1 by 4 centimeters above the right popliteal space. It had been growing since its first appearance two years before. It was excised surgically and prophylactic x-ray was given the right inguinal region. The patient was well in April, 1939.

COMMENT

In the material available, an attempt was made to correlate the microscopic findings with the clinical course. Without going into details, suffice it to say that a careful review of the sections, in consultation with Dr. Charles L. Connor, professor of pathology at the University of California, failed to show any method of predicting the clinical course from the pathologic findings. Malignant melanomas, which presented similar microscopic pictures, in one patient resulted in an early fatal ending, while in another it was apparently cured. The patients who were clinically cured for a reasonable period originally presented localized lesions with

no clinical evidence of metastatic growth. All of them were definitely enlarging, some at a relatively rapid rate when first seen. It is notable that the layman has been educated to the possible danger of moles that are growing, and as a result we are seeing more of these cases early in the curable stage.

CONCLUSIONS

1. Malignant melanoma may be cured if it is radically removed early enough in its course.

2. Either radical excision or thorough destruction by electrothermic means are acceptable forms of treatment.

3. The present pathologic criteria are not effective in judging the relative malignancy of an excised melanoma.

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THE ENDOMETRIUM IN MENSTRUAL DISTURBANCES OF THE CLIMACTERIC*

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THE term *climacteric* is used to designate the whole period of change in endocrine balance which takes place at the end of menstrual life. An important event at this time is the *menopause*, or cessation of the menses. This may occur abruptly, or it may be preceded by more or less marked irregularities in the intervals between bleeding episodes, or in the duration and amount of flow. The present study deals with the endometrial changes which occur in association with irregular uterine hemorrhage during the premenopausal period.

CLINICAL MATERIAL FOR THE STUDY

The material for this study was obtained from twenty climacteric clinic patients ranging in age from 38 to 52, with an average of $44\frac{1}{2}$ years. In no case were gross pelvic lesions demonstrable.

A careful record of climacteric symptoms and menstrual or abnormal uterine bleeding was available, and an attempt was made to obtain from one to three endometrial biopsies from each patient. These were secured one to three days before the onset of bleeding, during the course of bleeding or, on three occasions, at the time of an expected flow which did not occur until three or four weeks later.

Among the twenty patients, one had continuous bleeding over a period of four months. The remaining nineteen exhibited periodic bleeding, but presented a wide variation in the length of the interval between bleeding episodes and in the amount and duration of flow. These variations were noted not only in individual patients, but also from period to period in a given patient. In only two instances was there any degree of regularity in the cycle.

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TABLE I.
ENDOMETRIAL BIOPSY.

Late stage of secretion	4
Early stage of secretion	1
Atypical stage of secretion	1
Stage of proliferation	4
Hyperplasia of endometrium	8
Atrophy of endometrium	2
TOTAL	20

One of these patients presented herself because of a marked increase in the amount of flow, and the other because of troublesome hot flushes for a few days before each menstrual period.

CLASSIFICATION OF BIOPSY SPECIMENS

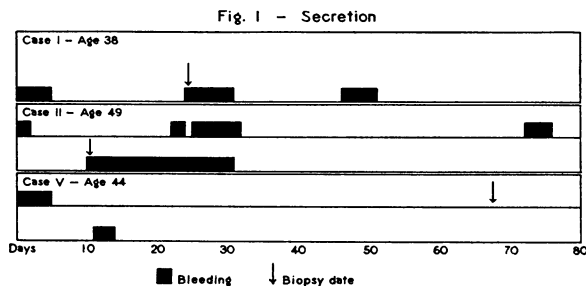
A classification of the endometrial biopsy specimens is given in Table 1, and it is noted that they fall into four predominant groups: (1) Stage of secretion; (2) stage of proliferation; (3) hyperplasia of the endometrium; and (4) atrophy of the endometrium.

1. *Stage of Secretion*.—In four instances the endometrium presented the appearance of a normal stage of secretion (premenstrual phase), in a fifth the secretory changes were imperfectly developed, and in a sixth the endometrium undoubtedly belonged to this group, but there were a number of atypical features observable in the microscopic sections.

In five of the six patients the biopsy specimen was obtained just before or at the time of a period of bleeding, and it may, therefore, be assumed that ovulatory cycles were present.

Two of the cases presented unusual features (Fig. 1). In the first, there was a twenty-day bleeding episode from a normal stage of secretion. This clinical observation is in keeping with the condition of "irregular shedding of the endometrium," or "prolonged defective desquamation" recently described by Pankow,¹ Traut and Kuder.² Its exact significance is not known, but it may represent a local disturbance. At any rate, the abnormal bleeding usually responds readily to a curettage.

In the second, a somewhat atypical stage of secretion was noted in a biopsy specimen obtained on the fifty-seventh day of a ninety-day period of amenorrhea. The endometrium showed an extensive subnuclear vacuolization, with small piknotic



Variation in cyclic bleeding from a Secretory Endometrium.