

9-1965

Abstracts

Follow this and additional works at: <https://scholarlycommons.henryford.com/hfhmedjournal>



Part of the [Life Sciences Commons](#), [Medical Specialties Commons](#), and the [Public Health Commons](#)

Recommended Citation

(1965) "Abstracts," *Henry Ford Hospital Medical Bulletin* : Vol. 13 : No. 3 , 397-400.

Available at: <https://scholarlycommons.henryford.com/hfhmedjournal/vol13/iss3/14>

This Article is brought to you for free and open access by Henry Ford Health System Scholarly Commons. It has been accepted for inclusion in Henry Ford Hospital Medical Journal by an authorized editor of Henry Ford Health System Scholarly Commons. For more information, please contact acabrer4@hfhs.org.

ABSTRACTS

Dyskeratosis congenita and familial pancytopenia. H. G. Bryan, and R. K. Nixon. J.A.M.A. 192:203, 1965.

Four or possibly five males in a kinship group had features of dyskeratosis congenita, a syndrome comprising poikiloderma atrophicum vasculare, dystrophia unguium, and leukoplakia oris. In addition, three members of the kinship demonstrated hematologic changes compatible with the hypoplastic anemia described by Fanconi. Based on the hemopoietic disturbance found in these three cases and that observed in seven similar cases from the literature, it is believed that the abnormalities associated with dyskeratosis congenita should be considered a further variant of the diverse congenital defects encompassed by the syndrome of Fanconi's familial pancytopenia.

Postural ophthalmodynamometry in the surgical management of occlusive aortocranial disease. R. G. Calderon, and A. B. Eisenbrey. J. Neurosurg. 22:30, 1965.

Postural ophthalmodynamometry was performed before and after the institution of therapy in 34 patients with proven occlusive aortocranial disease. Significant postural drop in pressure of the retinal artery was detected in 32, it was bilateral in 18 and unilateral in 12. Significant asymmetry of retinal arterial pressure between the two eyes was present in only 16 patients of the entire group. Seventeen patients underwent endarterectomy, and postoperative pressures of the retinal artery improved in all of them with the exception of three in whom the vessel had rethrombosed. Eleven patients received anticoagulants, two vasodilators, one anticoagulant and vasodilators, and three received no therapy. In these patients the retinal arterial pressures did not change after the institution of therapy. It is believed that postural ophthalmodynamometry provides a means of accurate evaluation of the functional patency of the aortocranial circulation following endarterectomy.

Neurologic manifestations of von Recklinghausen's disease of the nervous system. D. Canale, J. Bebin and R. S. Knighton. Confin. neurol. 24:359, 1964.

The neurologic manifestations occurring in a series of 92 patients with von Recklinghausen's neurofibromatosis are studied in an effort to learn more about the disease since the "textbook" description is usually incomplete, and past and current literature consists for the most part of case reports. The frequency of occurrence of neurologic manifestations is higher than generally reported, with males being affected twice as often as females. Symptomatic tumors occurred in 31 patients. Monosymptomatic (solitary) tumors which were amenable to surgical treatment occurred with greater frequency than generally appreciated. All degrees of cutaneous manifestations may be present and frequently minimal cutaneous stigmata are associated with widespread central nervous system involvement. Convulsions, mental retardation and radicular pain syndromes occur with sufficient frequency to be considered separately. They may occur independently of demonstrable CNS tumors. Many "rare" features of neurofibromatosis which are subjects of case reports occur in a single modest series, i.e., intraspinal ganglioneuromas, Schwannoma of hypoglossal nerve, precocious puberty and sacral meningocele.

Traumatized oval window fat grafts. R. C. Hayden, Jr., and T. M. McGee. Arch. Otolaryng. 81:243, 1965.

A series of 20 stapedectomies was performed on ten cats with replacement by normal, dried, or crushed fat autografts. The traumatized grafts effectively sealed the oval windows but were thinner and more fibrous, showed more inflammation than the normal controls, and had no recognizable fat cells. One graft was replaced by new bone and another was calcified. Two of the cochleas with crushed grafts had diffuse hair cell losses, but two other animals had unexplained losses in both control and experimental ears. The implications of these findings to clinical otology are commented on.

ABSTRACTS

Stress urinary incontinence in the female. C. P. Hodgkinson. Surg. Gynec. Obst. 120:595, 1965.

True appraisal of the statistical reports dealing with benefits claimed for efforts in the treatment of stress urinary incontinence has been difficult. Usually the results fall into three groups: completely cured, improved, and failed. It is probably safe to accept with confidence the group classified as completely cured. In the groups of patients categorized as improved and failed, it is necessary to question not only the accuracy of the initial diagnosis, but also the selection of the operative technique and the efficiency with which the operation was accomplished. In an overall analysis during the last decade, there appears to have been some improvement over the mystical 85 per cent cure rate which seems to dominate almost every report. Most operative techniques which have withstood the test of time, have attributes which commend them as best suited for certain types of urethrovesical anatomic relationships. Proper selection of the operative procedure and establishment of a more accurate diagnosis remain the challenges of the future.

Chronotropic action of serotonin studied by direct perfusion of the sinus node. T. N. James. J. Pharmacol. Exp. Ther. 146:209, 1964.

In contrast to its reported accelerating action in isolated heart preparations, serotonin has only a negative chronotropic effect on direct perfusion of the sinus node *in vivo*. There is no significant cholinergic component in this local slowing effect. Certain observations suggest the bradycardia may be a direct action on sinus node fibers, but an antiadrenergic mechanism has not been excluded.

Pathology of the cardiac conduction system in hemochromatosis. T. N. James. New Eng. J. Med. 271:92, 1964.

In each of the hearts of five patients with hemochromatosis there were iron deposits with associated tissue damage in the atrioventricular node but not in the sinus node. Heart block and arrhythmias, which have commonly been described in hemochromatosis, are probably related to this abnormality in the cardiac conduction system. It is not clear why the sinus nodes did not contain pathologic iron pigment.

Chronic retroperitoneal pelvic abscesses. W. H. Janke, and M. A. Block. Arch Surg. 90:380, 1965.

Chronic retroperitoneal pelvic abscesses are frequently difficult to identify so that the diagnosis is often made late in the course of the disease. The etiology, diagnosis and surgical approach to these abscesses are discussed, based on an experience with 18 patients. High presacral and rectovesical abscesses appeared to have caused the most difficulty in the past and are emphasized.

Quantitative histological study of rib from 18 patients treated with adrenal cortical steroids. M. Klein, A. R. Villanueva and H. M. Frost. Acta Orthop. Scand. 25:171, 1965.

The number of places where bone remodelling activity occurs was found to be depressed in ribs from 18 patients treated longer than two months with adrenal cortical steroids. This depression seems to arise from some change in the activity of the mesenchymal cell population, which generates osteoclasts and osteoblasts. The speed with which an individual formation focus evolves seems to have been depressed also in these ribs. This depression appears to arise from a change in the activity of the osteoblast population. There was no evidence of increased bone resorption, and possibly a suggestion that resorption was decreased.

Transcardiac membranotomy for obstruction of the hepatic portion of the inferior vena cava. C. R. Lam, E. Green, and H. Gale. Circulation 31 (Suppl. 1):188, 1965.

It is probable that there are many unrecognized cases with membranous obstruction of the hepatic portion of the vena cava. It is evident that the evaluation of patients with swelling of the bilateral lower extremities must include cardiac catheterization with measurements of the pressure at various levels of the vena cava and angiographic studies. If a significant obstruction is found in this portion of the vena cava, exploration through the right atrium is indicated.

ABSTRACTS

Acute idiopathic pericarditis; report of a fatal case, with brief review of the literature. H. Y. Liu and R. Garcia. *Amer. Heart J.* 69:677, 1965.

A fatal case of idiopathic pericarditis is reported, with a brief review of the literature. The incidence of cardiac arrhythmias, their mechanism, and their possible role in the sudden death of some of these patients are discussed. The possible grave outcome of idiopathic pericarditis when associated with other myocardial disease is emphasized. The diagnostic challenge presented by this entity in older patients, with associated cardiovascular diseases of varied etiology, was briefly discussed.

*Studies on the respiratory chain-linked reduced nicotinamide adenine dinucleotide dehydrogenase. VII. "Labile" sulfide groups in the dehydrogenase and in related proteins. C. J. Lusty, J. M. Machinist, and T. P. Singer. *J. Biol. Chem.* 240:1804, 1965.

Reduced nicotinamide adenine dinucleotide dehydrogenase from heart mitochondria contains flavin mononucleotide, nonheme iron, and "labile" sulfide in approximately the molar ratio of 1:16 to 18:27. On conversion of the dehydrogenase to reduced nicotinamide adenine dinucleotide-cytochrome *c* reductase by acid-ethanol at 42-44°, or by thermal fragmentation, the majority of the iron and of the labile sulfide is lost. While flavin mononucleotide, iron, and labile sulfide are stably bound in the dehydrogenase, sulfide and flavin mononucleotide are weakly bonded in the cytochrome reductase fragments. Progressive loss of sulfide occurs on storage of such preparations even in concentrated, neutral solutions at -15°. The succinic-coenzyme Q reductase complex has been found to contain covalently bound flavin and labile sulfide in approximately the molar ratio of 1:8. The zinc flavoprotein D(-)-lactic-cytochrome *c* reductase is devoid of labile sulfide. It is suggested that labile sulfide may be specifically associated with oxidizing enzymes containing nonheme iron.

Effects of triiodothyronine and thyroxine on the lipolytic action of epinephrine in markedly obese subjects. C. Mautalen and R. W. Smith, Jr. *Amer. J. Clin. Nutr.* 16:363, 1965.

In patients with marked obesity, the administration of triiodothyronine in physiological amounts partially corrected the impaired response of plasma free fatty acids (FFA) to intravenously administered epinephrine. This effect was noted only in the release phase of the FFA response. That it was not an effect specific for markedly obese subjects was shown by the augmentation of the normal response of FFA which occurred in the plasma of nonobese subjects given epinephrine. Thyroxine in replacement doses was without significant effect. With hyperthyroid doses, triiodothyronine normalized the FFA release phase but the clearance of FFA remained impaired. A role for triiodothyronine in the causality and treatment of marked obesity is not suggested by these results.

Enzyme histochemistry of the sinus and atrioventricular nodes of the human heart. A. R. Morales, and G. Fine. *Lab. Invest.* 14:321, 1965.

A histochemical enzymatic survey was performed in sinus and atrioventricular nodes of "normal" human hearts of patients one month to 70 years of age. Oxidative enzymes representing various aspects of muscle metabolism (glycolysis, hydrolysis and fatty acid oxidation, Krebs cycle, etc.) and hydrolytic enzymes were studied using frozen sections. With the exception of adenosine di- and triphosphatases, nodal enzymes appear qualitatively and quantitatively similar to those of the working myocardium. These findings differ from other observations in various animal species and suggest that human sinus and atrioventricular node metabolism is similar to that of the working heart muscle. The concentration of adenosine diphosphatase and adenosine triphosphatase appears similar in the right atrial, sinus, and atrioventricular nodal muscles where it is greater than in the ventricular muscle.

*From Edsel B. Ford Institute for Medical Research.

ABSTRACTS

Seborrheic verruca and intraepidermal basal epithelioma of Jadassohn. A. Morales, and F. Hu. Arch. Derm. 91:342, 1965.

A case of seborrheic verruca with characteristic changes of the so-called intraepidermal basal cell epithelioma of Jadassohn is presented. Within three days following irritation caused by the trauma of a surgical biopsy, this lesion "matured" showing histological changes suggestive of squamous cell carcinoma. This lesion presented in different areas histological pictures characteristic of typical seborrheic verruca, intraepidermal basal cell epithelioma of Jadassohn, and basosquamous cell epidermal tumor of Lund, suggesting that these changes represent variations of one tumor, namely, seborrheic verruca.

Evaluation of some technical variations applied to two standard tests for syphilis. T. R. Neblett, and L. R. Merriam. Amer. J. Clin. Path. 43:281, 1965.

Two serologic test variations have been described which seem to have value when performed on a routine basis: (1) *A VDRL standard slide test modified* by an additional 4-min. rotation period and a second reading. The term *HOLD* was introduced to describe the type of reaction which was somewhat stronger than a nonreactive and became weakly reactive following the second 4-min. rotation. (2) *Re-testing of nonreactive RPCF serums* after frozen storage for at least 1 week. The effect of these two modifications was to enhance test sensitivities. In a group of 365 luetic patients, the VDRL sensitivity in our hands was increased from 47.7 to 99.7 per cent, and the RPCF sensitivity was increased from 75.9 to 95.9 per cent. Of the RPCF negatives re-tested after freezing, 82.6 per cent became weakly reactive or reactive. Such increased sensitivity has enabled us to detect numerous cases of syphilis, many in the late latent category, which probably would have remained undetected otherwise. The greatest number of patients fell into the middle fifties age bracket, and medical histories revealed that most of these persons had histories of disease dating back 20 to 30 years. Some were found to have been evaluated just recently because of our results, never having had treatment previously.

Neuropathy of diabetes mellitus. W. E. Redfern, J. Bebin, and A. B. Eisenbrey. J.A.M.A. 192:231, 1965.

Presented as a scientific exhibit at the 18th clinical convention of the American Medical Association, Miami Beach, Florida, November 29-December 2, 1964.

Angioplasty in the treatment of peripheral occlusive arteriopathy. Summary of 12 years' experience. D. E. Szilagyi, R. F. Smith, J. G. Elmquist, A. Gonzalez, and J. P. Elliott. Arch. Surg. 90:617, 1965.

A statistical survey of 816 reconstructive operations for the treatment of aorto-iliac and femoropopliteal arterial occlusive disease followed for up to 12 years was made. The immediate patency rates in all operations appeared satisfactory. The late patency rates of aorto-iliac operations, whether utilizing grafting techniques or endarterectomy were good. In femoropopliteal operations, the late results were poor with arterial homografts and Helanca-Dacron prostheses but excellent with autogenous vein grafts. As the result of this survey we recommend the use of (a) endarterectomy in the treatment of aorto-iliac occlusive disease where the involvement does not extend distal to the common iliac artery; (b) bypass operations with Dacron prosthesis when the aorto-iliac disease involves the external iliac and common femoral arteries; and (c) autogenous vein bypass graft as first choice in femoropopliteal occlusive disease. We point out that in combined aorto-iliac and femoropopliteal arterial occlusive disease the correction of the distal component is seldom necessary.



