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responses, particularly by an increased blood pressure or by the mild generalized vasoconstriction in inactive tissues. The pilot who blacks out in high G maneuvers, simply because of a reduced hydrostatic cerebral blood pressure, might find isometrics of help. One could further conjecture that an athlete seeking power for his final sprint might benefit from an increased perfusion pressure by isometric hand exercise. But, until these and other investigations underway have been completed, it would be unwise to assume that such beneficial effects exist.

ALEXANDER R. LIND

References
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3. LIND AR, McNicol GW: Circulatory responses to sustained hand-grip contractions performed during other exercise, both rhythmic and static. J Physiol (London) 192: 595, 1967

First Angina — Isometrics?

Winston Churchill — December 27, 1941

He was in bed and looked worried.

"It was hot last night and I got up to open the window. It was very stiff. I had to use considerable force and I noticed all at once that I was short of breath. I had a dull pain over my heart. It went down my left arm. It didn't last very long, but it has never happened before. What is it? Is my heart all right? I thought of sending for you, but it passed off."—MORAN, C. McM. W., BARON: Churchill: The Struggle for Survival 1940-1965. Taken from the Diaries of Lord Moran. Boston, Houghton Mifflin Co., 1966, p. 17.
23. SAN MARCO ME, FRONEK K, PHILLIPS CM, ET AL: Continuous measurement of left ventricular volume in the dog: II. Comparison of washout and radiographic techniques with the external dimension method. Amer J Cardiol 18: 584, 1966

25 Years Ago

An operation for increasing the flow of blood through the lungs and thereby reducing the cyanosis in patients with congenital malformations of the heart consists in making an anastomosis between a branch of the aorta and one of the pulmonary arteries, in other words, the creation of an artificial ductus arteriosus. Thus far the procedure has been carried out on only three children, each of whom had a severe degree of anoxemia. Clinical evidence of improvement has been striking. . .—BLALOCK A, TAUSSIG H: The surgical treatment of malformations of the heart in which there is pulmonary stenosis or pulmonary atresia. JAMA 128: 189, 1945.
Minuscule Review


One of the products of the prospective (natural history) studies on children with congenital heart disease has been the documentation of a metamorphosis of one hemodynamic and structural syndrome into that of another. The authors report on a patient, with hemodynamic studies, who developed hypertrophic right ventricular obstruction with a ventricular septal defect. The closing of the latter resulted in the case being changed to one of an isolated (infundibular) pulmonary stenosis. Successful surgical treatment was accomplished. It is pointed out that the case represents an unique and remarkable variant of spontaneous closure of a ventricular septal defect, and it contrasts with accepted transformation of a ventricular septal defect with an initially large left-to-right shunt to a tetralogy syndrome—a reversal of the shunt occurring with the development of right ventricular infundibular obstruction.

H.B.B.


Foetal Circulation — Harvey 1628

... For the right receiving the blood from the ear, thrusts it forth through the vena arteriosa, and its branch called canalis arteriosus, into the great artery. Likewise, the left at the same time by the mediation of the motion of the ear, receives that blood, which is brought into the left ear through that oval hole from the vena cava, and by its tention and constriction thrusts it through the root of the Aorta into the great artery likewise. So in Embryons whilst the lungs are idle, and have no action nor motion (as if there were none at all) Nature makes use of both the ventricles of the heart, as of one for transmission of blood. And so the condition of Embryons that have lungs and make no use of them, is like to the condition of those creatures which have none at all. —The Anatomical Exercises of Dr. William Harvey; De Motu Cordis 1628; De Circulatione Sanguinis 1649 (first English text). Edited by Geoffrey Keynes. London, The Nonesuch Press, 1653, p. 46.
Plain Talk

From Chaos to System in Medical Records

... precise communication will not alone lead to the best in medical practice, any more than precisely transcribed music makes a great performer. ... For most patients the physician's "art" will be sufficient if they can be assured that their doctor is aware of the highest standards of medical practice and if he handles the data on their problems in a disciplined and orderly way.

There are a few who fear that rigid concentration on the patient's problems will emphasize only the physician's practical knowledge and development, creating a species of tradesman who, enslaved by the technical expertise of an era, will be unable to meet new situations in a changing world. But the approaches described in this book will demand of the practitioner, the faculty, and the student clarity of thought, a research-oriented attitude, and a willingness to apply first principles to the changing situations inherent in the infinite variety of combinations of interacting medical problems. Biological realities, honestly confronted, facilitate rather than hinder scientific advance. That confrontation is the art of medicine.—From Lawrence L. Weed: Medical Records, Medical Education, and Patient Care. Cleveland, The Press of Case Western Reserve University, 1969, pp. 142-143.
Of Pertinence to Editors' Quandaries re Medical Research and Informed Consent
Milton 1644

But some will say, “what though the inventors were bad? the thing for all that may be good.” It may so; yet, if that thing be no such deep invention, but obvious and easy for any man to light-on, and yet the best and wisest commonwealths through all ages and occasions have forborn to use it, and falsest seducers and oppressors of men were the first who took it up, and to no other purpose but to obstruct and hinder the first approach of reformation; I am of those who believe, it will be a harder alchymy than Lullius ever knew, to sublimate any good use out of such an Invention. Yet this only is what I request to gain from this reason, “that it may be held a dangerous and suspicious fruit, (as certainly it deserves, for the tree that bore it,) until I can dissect, one by one, the properties it has.”—MILTON, JOHN: Areopagitica: A Speech for the Liberty of Unlicensed Printing, to the Parliament of England (1644). In Occasional Essays on Various Subjects, Chiefly Political and Historical; Extracted Partly from the Publick Newspapers. London, 1809, p. 201.
Minuscule Review

Multiple Cerebral Aneurysms and Cardiac Myxoma


The publication of case reports has often been derided as low level scholarship and second class scientific journalism. However, in the unique experiment of nature the perspicacious student may see revealed a phenomenon that whets his curiosity regarding mechanisms of disease and engenders clues as to the proper choice of investigational procedures. Such were my reactions in seeing the "Brief Recording" of the case of a 41-year-old woman who presented herself with evidence of disease in the left cerebral hemisphere and was demonstrated to have aneurysms of the middle cerebral artery. (The illustration does not really demonstrate these to my complete satisfaction, but undoubtedly they would be more clearly defined in the original angiographic plates.) The patient died following intracranial surgery at which time cerebral infarction was found. The postmortem examination revealed a left atrial myxoma. The aneurysmal lesions were described as a dilatation of the arterial lumen containing myxomatous tissue with a fragmented internal elastic lamina. There was a low grade "interstitial myocarditis," but no mention is made of lesions elsewhere, such as the kidneys.

This case differs from an incidental tumor embolus in that there is the possibility that the lesions were related to arteritis, an immunologic tissue response to the tumor cells, a type of reaction that is gaining more attention in recent years. From the pragmatic viewpoint, a lesson may be learned, that persons with embolic symptoms could have a left atrial myxoma, even if a rare lesion. One clue to its presence might be an abnormal electrophoretic pattern with increase in the alpha-2 and gamma globulins. It is not very unusual that the tumor expressed itself by peripheral signs without evidence of its presence being suspected by routine clinical examination of the heart.

H.B.B.
On the Feelings of Authors

On Licensing of Printers
Milton 1644

... When a man writes to the world, he summons-up all his reason and deliberation to assist him; he searches, meditates, is industrious, and likely consults and confers with his judicious friends; after all which done, he takes himself to be informed in what he writes, as well as any that writ before him; if in this the most consummate act of his fidelity and ripeness, no years, no industry, no former proof of his abilities, can bring him to that state of maturity, as not to be still mistrusted and suspected, unless he carry all his considerate diligence, all his midnight watching, and expense of Palladian oil, to the hasty view of an unleisured Licenser, perhaps much his younger, perhaps far his inferior in judgment, perhaps one who never knew the labour of book-writing; and, if he be not repulsed, or slighted, must appear in print like a puny with his Guardian, and his Censor's hand on the back of his title, to be his bail and surety, that he is no ideot or seducer; it cannot be but a dishonour and derogation to the author, to the book, to the privilege and dignity of Learning.—MILTON, JOHN: Areopagitica: A Speech for the Liberty of Unlicensed Printing, to the Parliament of England (1644). In Occasional Essays on Various Subjects, Chiefly Political and Historical; Extracted Partly from the Publick Newspapers. London, 1809, p. 218.