Angiological Diagnosis

The XXIIInd Scientific Meeting of the Italian Angiologic Society was dedicated to “angiologic diagnosis.” The theme was divided into two phases, the first one being a “panel discussion”, the second one consisting of a series of interventions concerning the general subject. For the “panel discussion” the following questions had been previously formulated: 1. What have been the principal acquisitions in angiologic diagnosis during recent years?—What are the acquisitions in physical non-instrumental semiology?—What are they in physical instrumental semiology (angiography and radiologic methods, oscillometry, plethysmography, rheography, fluximetry, rheotachymetry, electromanometry, electromyography, thermometry, osteometry, ana- and diachysic methods, etc.)?—What the acquisitions in humoral and chemical-clinical semiology?—2. What, particularly, have been the diagnostic acquisitions in the single angiologic chapters (arteriology, phlebology, micro- and histangiology, lymph-angiology)?—3. What advantages had angiologic nosology from the acquisitions of diagnosis?—Have the angiologic syndromes been better defined in their symptomatology (vascular diseases properly)?—Have the angiologic components (pathogenetic and symptomatic) of ailments, not primitively and pre-eminently vascular, been better defined?—4. What help can angiologic diagnosis give in favour of prognostic precision?—5. Of what importance are the doctrine and practice of angiologic diagnosis as regards the establishing of the angiologic doctrine’s autonomy?—Do they help to give better shape to an “angiologic speciality” among the other medical-surgical specialities, with individuality “pa ad pares”, and to underline the work of the angiologist as a “specialist” in the practice of individual and collective medicine?

Among the speakers entrusted with answering these questions were respectively the professors G. S. Donati (Pavia) on surgical angiology, E. Greppi (Florence) on medical angiology, G. Gigli (Perugia) again on medical angiology under the particular outline of radioisotopic techniques, A. Lanzara (Naples) on cardiovascular surgery, E. Mian (Pisa) on micro- and histangiology, G. F. Paleari (Milan) on angiologic problems orthopaedically and traumatologically interesting, F. Pratesi (Florence) and G. Strano (Rome) on instrumental angiologic methods, R. Scalabrino (Milan) on problems of internal angiology, I. Donini for M. Battezzati (Genova) on lymphangiology, F. Aschieri (Turin), G. Bassi (Trieste), F. Franzini (Brescia) on questions belonging to the methodologic autonomy of the angiologic speciality. Moderators were the professors E. Tosatti (Siena) and L. Condorelli (Rome), under the presidency of prof. M. Cornel (Pisa), entrusted with the synthesis.

The first series of questions concerned closely the subject of the principal acquisitions, during recent years, of angiologic diagnosis, instrumental, not instrumental and chemical-clinical
humoral, related to the single angiologic chapters (arteriology, phlebology, micro- and histangiology, lymphangiology). Discussion made it evident in the first place that for some time classic semeiology is progressively being revalued (based on non-instrumental remarks of inspective, palpatory, auscultatory, percussory order, etc.), although it had been put aside for years by the uncontested favour for instrumental methods, based on costly and complicated apparatuses, which still give data often not very superior to those which could be acquired by simple “ratio et observatio” and by a vigilant use of the senses. In this regard the practice of auscultating peripheral arteries was mentioned (amplifiable by phonocardiographic documentation), as well as the data concerning the binomial “temperature-colour” test and the venous refilling in postural and tying tests, the relations between the dermatologic (“external”) aspect of the dystrophic angiopathic syndromes and the seat and nature of the vascular insufficiencies, which are their basic conditions.

In the section of instrumental semeiology the more recent progresses obtained using angiography, angiocinematography, collateral radiologic methods, oscillography, rheography (with special care of endocranic and renal circulation), microsphygmography and pletismography, electro-manometry, epithermia, etc. were summarized, remarking on how the present main paths of progress of these methods lead away from their static use, directing themselves always more to a dynamic use (related to postural, pharmacodynamic and strain tests). The discussion on fluximetry had a field to itself, as it was noticed that the decisive functional importance of the quantitative data of irrigation capacity does not yet find full and adequate correspondence in the instruments that can be clinically used, generally indirect up to the present, although they are indicatively useful. The use of radioisotopes in angiologic diagnosis, in evaluating circulation time (with special consideration for lung and portal circulation) as well as in determining flow capacity (by means of dilution, clearance and build up) was equally and carefully considered during the discussion.

The interest in exploratory methods of the functions of small vessels, conducted for diagnostic purposes, was underlined, but the methods’ complexity and limitations also emerged. The new possibilities which opened out in this sense by capillary microscopy were mentioned as well as the use of ana- and diachysic methods and of the dermographic reactivity. The resort to histologic examinations after superficial and deep biopsy of disangic districts resulted in its being still of a precious and often unreplaceable practical value.

In the chapter concerning humoral semeiology the diagnostic meaning of immuno-hematologic and cryoagglutination methods were analysed as well as the study of the fibrinolytic power and the enzymatic activity carried by blood, in several angiopathies which were recognized with difficulty during prodromic stages.

The question was then debated about the advantages eventually found by angiologic nosology, owing to the improvement of diagnosis, in the angiologic syndromes proper as well as in diseases with angiologic components, but not primitively and pre-eminently vascular. The result of this discussion was that the conception of vascular pathogenesis of several ailments, more or less marginal, belonging to angiology, has undoubtedly become richer; but uneasiness was also made evident, due to an incomplete angio-nosologic taxonomy, disputed and, above all, not univocally interpreted by those who have to diagnose. Pictures with apparently acquired nosologic value (such as the syndromes of Buergers, Raynaud and Martorell) are in reality not concordantly understood in their nosologic significance; and diagnostic proceeding suffers from it.

More comforting is the result of discussion on weighing relations between angiology diagnosis and prognostic preciseness, the subject of a further question of the “panel”. Many methods of instrumental angiologic semeiology are in fact fit to give information on a vascular ailment,
more on “how much” rather than on “which”, and graduating its seat and its limits with subtle precision, measuring its course analytically and prognosticating its evolution precociously.

As a natural corollary of this discussion the concept was derived

that angiologic doctrine is autonomous, with an individuality “par ad pares”, compared with the other doctrines of medical practice; this concept is comforted also by the special complexity of diagnostic instrumentation, necessary to explain the not often easy pictures and the different characters of angiopathies.

The general propositions stated at the round-table symposium were evocatively integrated by some special contributions offered by the communications which followed. The refining of lymphangiographic techniques emerged from the statements of Donini and Belardi (Genova) on inguinopelvic phlebo-lymphography and of Tosatti (Siena) on the usefulness of lymphangiographic characterization and on the tying of iliacophemoral lymphatic dilations, as an introduction to an efficacious Charles surgical operation in chronic lymphoedema. The subject regarding fluximetry was developed in the contributions of Becattini and Loddi (Florence), who availed themselves of rheo-graphic methods and of Mian (Pisa) who underlined the unreplaceable functional histangiographic value of data on postischemic-hyperemia. Pratesi et al. (Florence) have extrapolated from seroangiographic and micro-sphygmnometric reports the possible microangiologic meaning, while others have underlined the value of the thermic cutaneous muscular gradient, such as Nuti et al. (Florence) and the cutaneous articular one, such as Paleari et al. (Milan). The latter, together with Borroni (Milan), has reasserted the precious diagnostic value of angiography in identifying and locating bone blastomes and vascular anomalies hidden in seats only accessible with difficulty. The last subject was also developed by Limentani (Milan), who considered cases of fusion of the cerebral arteries. The diagnostic and prognostic meaning of oxy-metry was again stressed by Cangi (Florence) and that of farmacodynamic tests by Guagliano et al. (Pavia), and of the postural tests by Deidda et al. (Florence). Tosatti et al. (Siena) have explained how it is possible to enter into the renal pelvis by uretral way, thus registering the sphygmic impulses of the renal flux.

At the end of the Meeting a film was projected (by Brondolo and Frassi, Milan) on the experimental roentgencinematographic study of the bone venous circulation, provoking evocative iconographic and mental pictures.

The brilliant success of the meeting has suggested to declare its triennial periodicity, so as to bring up-to-date the subject of angioologic diagnosis, which seems to awaken the most lively and passionate interest of those specializing in this matter. E. Mian, Pisa.