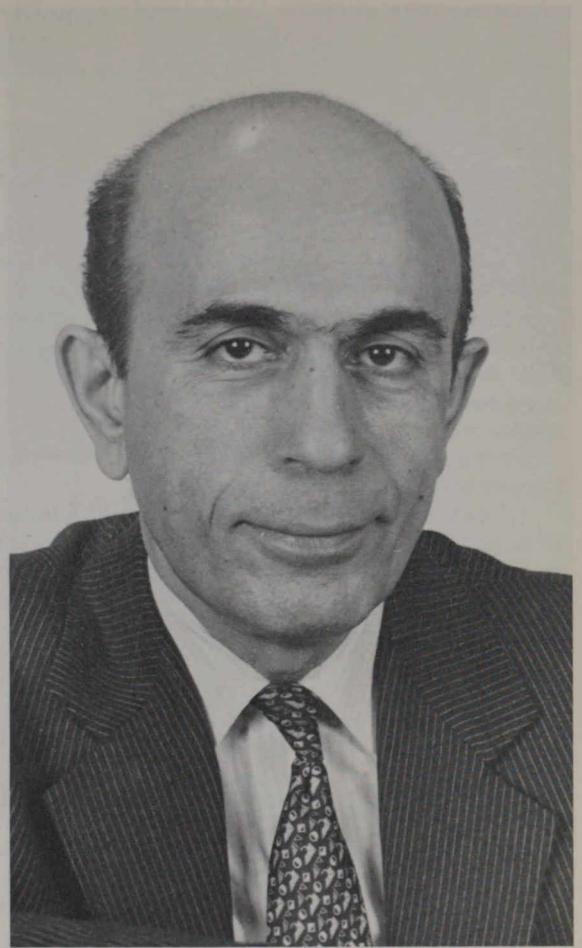


magnetic field, fall into line. Stimulated by radio waves, they give off absorbed energy in the form of radio signals which vary in strength according to their positions. When fed into a computer, the variations produce a high-resolution image of the organ in question. NMR can detect a tumor only two or three millimeters in diameter. The images produced by a CAT scanner give information about tissue, but NMR gives information about the physiology (or function) of the tissues too.

The nuclei of some other elements such as phosphorous, which plays an important metabolic role in the human body, also respond to NMR. Researchers can study, without surgery, how basic processes differ in normal and diseased cells. They can observe how a tumor grows or how diseased bones deteriorate.

The University of Alberta team will install its \$2.2 million custom-made super-conducting magnet NMR system this summer. It will concentrate on cancer research, first with small animals, later with people.

An NMR system has also been installed at the University of British Columbia in Vancouver, and one is planned in Quebec. The Ontario government has approved the purchase for hospitals in Toronto and London.



Dr. Habib Davanloo

Short-term Dynamic Psychotherapy

Dr. Habib Davanloo, associate professor of psychiatry at McGill University in Montreal and director of outpatient psychiatric services at Montreal General Hospital, is the founder of a new school of psychotherapy.

The technique—short-term dynamic psychotherapy—shortens therapy time from years to months, and, even its detractors acknowledge, produces extraordinary results.

One patient, for example, who had been unable to drive a car, fly in a plane, board a subway, ride in an elevator, go to a movie or eat in a restaurant and who had been in conventional therapy for seven years, was free of all these governing fears after thirty-two, hour-long sessions.

The therapy has three distinctive characteristics: it is confrontational—the therapist challenges the patient aggressively; it is recorded—each session is videotaped and reviewed by both therapist and patient; and it is compact—the patient is forced to plumb the source of his behaviour in fifteen to forty sessions.

Prospective patients are evaluated in two sessions with different therapists and are not accepted for treatment if they exhibit a low tolerance for anxiety. Its proponents claim that it can be used successfully in 35 per cent of cases.

Dr. Davanloo, who describes himself as “a relentless healer,” began applying the technique in the early 1960s.

Dava Sobel, writing in *The New York Times Magazine*, described the theory behind it:

“A major reason for the challenging [of the patient by the therapist] is . . . to prevent the formation of the so-called transference neurosis. In classical analysis, the silence [by the therapist] allows the patient to breathe his own life into the person of the therapist, embroidering elaborate fantasies about what the doctor thinks, feels and does. Typically, his thoughts about the doctor and his reaction to the doctor repeat all the troubled relationships of his life. The creation and resolution of this transference neurosis are the essence of psychoanalysis. In short-term dynamic psychotherapy, however, the doctor works constantly to bring the patient’s feelings toward him to the surface.”

Dr. Davanloo spends much of his time training psychiatrists. Institutes for training have been established in Montreal, London, New York City, Hartford, Connecticut, Woodcliff Lake, New Jersey, and Charlottesville, Virginia, and one is planned in Madrid. It takes two years of rigorous effort to master the technique.