

# THERMOGRAPHY IN LOW BACK DISEASES

MICHAEL M. RASKIN, MD

University of Miami School of Medicine  
Miami, Florida  
Lauderdale Lakes Medical Center  
Lauderdale Lakes, Florida

## Discogenic Disease

The first use of thermography in the evaluation of lumbar disc disease was in 1964, when Albert reported its use in orthopedic problems and included a thermogram of a patient with a herniated disc.<sup>1</sup> At about the same time, Heinz<sup>2</sup> and Goldberg<sup>3</sup> reported that 4 of 21 lumbar herniations they studied showed abnormal infrared emission patterns. In 1968, Edeiken<sup>4</sup> reported abnormal thermograms in 23 of 29 patients with herniated discs.

The majority of patients with an acute herniated intervertebral lumbar disc have signs and symptoms which can be clinically localizing. In these patients, myelography is performed mainly for confirmation. However, a minority of patients with a herniated intervertebral lumbar disc will present with confusing signs and symptoms, and myelography may be required to help make an accurate diagnosis.

## *Normal Lumbar Thermogram*

The patient's back is exposed and is allowed to equilibrate with the 20°C ambient room temperature for 10 minutes. The lumbar thermograms are performed in the erect position and include an area from the lower thoracic spine to the midportion of the buttocks.