A knowledge of the past in medicine is always profitable to the student, demonstrating that keen observation and hard work can overcome many obstacles; recalling that major accomplishments have often been obtained with but meager and inadequate tools. Looking backward, we both admire and derive inspiration from the life and work of such a pioneer in his chosen field as Preston Manasseh Hickey. Recalling to mind a few facts concerning the life and work of this eminent physician will picture to us a man who was one of the leaders and pioneers in radiology. Some men are great because of outstanding individual accomplishments, but to our mind the greatest man is the teacher who not only does outstanding work himself but transmits his knowledge to others and is an inspiration and guide to younger men who are fortunate enough to be associated with him.

Preston M. Hickey was born in Ypsilanti, Michigan, in 1865. He attended the Detroit Public Schools and the University of Michigan, where he received his Bachelor of Arts Degree in 1888. This classical training provided him with a basis for a broad cultural background, rounding out a personality which might otherwise have become too exclusively devoted to "dry and scientific" matters. It is said that he was once reproached by a casual shipboard acquaintance for just such a narrow attitude and that he silenced his critic by the eloquent recitation of Shelley’s "To a Skylark."

In 1892 he obtained the degree of Doctor of Medicine from the Detroit College of Medicine and Surgery. Thereafter his interests were varied, including photography, microphotography, and pathology. Early in his medical practice he specialized in diseases of the upper respiratory tract and chest. These pursuits, together with his desire to obtain perfection in the removal of foreign bodies from the eye and the bronchial tree, paved the way for his ultimate specialization in roentgenology. As a result, he acquired one of the first roentgen-ray machines in the State of Michigan. It is not surprising, in view of his interest in photography, that he placed great emphasis on the proper technic in making x-ray plates and was among the first to develop an illuminated lightbox for plate reading.

Doctor Hickey was constantly concerned with the welfare of his patients and considered their interests best served when a short history was taken at the time of radiographic examination, in order that the films might be interpreted in the light of the clinical findings. He had little patience

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are fixed to the support, they are tied about
the patient's legs in order to hold them
firmly. The illustration shows a support
in the shoulder region bearing some weight,
but this is not essential. With this sling,
even a paralyzed patient can be examined
at any angle up to the perpendicular with
complete safety.

When the cervical spinal canal is being
examined, the chin is raised and extended.
This aids in preventing the contrast ma-
terial from passing from the cervical region
into the fluid spaces within the skull. The
Pantopaque (ethyl iophenylundecyl-
ate) is the contrast material used in all of
our myelograms. It is routinely removed
immediately after completing the radio-
graphic examination. This usually can be
accomplished with very little difficulty.

The case history, roentgen findings, and
operative findings in an unusual case of
herniated nucleus pulposus in the cervical
area follow.

CASE 5A: A 32-year-old Negro male entered our
hospital having had symptoms for ten months prior
to admission, including numbness and tingling in the
right hand and a gradually developing spastic right
hemiparesis beginning in the right arm and spread-
ing to the right leg. The muscles of the hand were
paralyzed and the patient complained only of a dull
aching sensation in the right shoulder. There was
no history of trauma.

The patient was well developed and well nour-
ished, with a spastic paresis of the right leg and a
mixed spastic and flaccid paralysis of the muscles of
the right hand. There was loss of pain and tem-
perature sensation on the left side of the body, a
typical Brown-Séquard syndrome being present.
The spinal puncture done at this hospital showed a
complete obstruction of the canal, demonstrated by
the Queckenstedt test. Spinal puncture and myelogram done elsewhere, one month prior to ad-
mission to this hospital, were said to have been
normal. Myelography was done, with 6 c.c. of
Pantopaque, this amount being used routinely in our

![Fig. 15A. Case 5A: Cervical myelogram showing block of cervical canal at level of fifth cervical vertebra. The patient was in an inverted position with the head down and was almost perpendicular. Each of the serial exposures apparently shows the block at a different level. This is due to a shift in the position of the film, the obstruction being at the level of the fifth cervical vertebra.](image)
cervical myelograms. The progress of the column through the canal was entirely normal until it reached the level of the lower margin of the fifth cervical vertebral body. Here the column split and passed upward along each side of the canal to the level of the upper margin of the fifth cervical vertebral body, where the progress was completely arrested. At this time the patient was almost perpendicular, his head being down and his chin completely extended. There was no pulsation in the column of material and no movement upon coughing. It was obvious that there was a complete block, the lower margin of which was at the level of the lower margin of the body of the fifth cervical vertebra. It was our opinion that a tumor of some type was present, blocking the canal. Major May said thought that the tumor was probably intramedullary but extramedullary, while we, in the x-ray department, thought that it was probably intramedullary. Our findings are shown in Figure 15A; the cephalic portion of the canal is at the lower margin of the illustration, indicating the position of the patient when the exposures were made.

At operation a large herniated nucleus pulposus was demonstrated at the level of the interspace between the bodies of the fourth and fifth cervical vertebrae. The adjacent nerve roots were not compressed thereby, accounting for the absence of pain. The cord, however, on the right side was markedly compressed. The laminae of the fifth and sixth vertebrae were removed, for it had been anticipated that the lesion was a new growth and not a herniated nucleus pulposus. The herniated nucleus was removed. The patient’s convalescence has been uneventful and he has shown a progressive return of function since operation.

This case seemed to us to be of unusual interest because of the slow progression of
There are 61 Pages with this MJA however, the one’s place here are those relevant to dose used and its reference to ‘using 6 cc’ a doubling of such within months of it being approved by the FDA at a Recommended dose of 3 cc deemed to be safe at that level. NO FDA approval of an increase to 6 cc can be found.