

# The Jaffe and Mankin Digital Image: Collections at the MGH

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**H**enry L. Jaffe MD was an extraordinary Pathologist who contributed more than anyone else to our knowledge of musculo-skeletal pathology. Jaffe was born in New York City in 1896, attended and received a doctorate from New York University in 1920. He served at Bellevue Hospital and subsequently at Montefiore Hospital. He became interested in Pathology and became a student and colleague of David Marine at Montefiore. In 1924 Jaffe became Chief of Pathology at the Hospital for Joint Diseases, a post he held for four decades until his retirement in 1964, but he remained there as a consultant, teacher and spectacular collector of pathologic material. He became a very competent consultant for cases sent to him from all over the world, many of which he added to his remarkable collection. He wrote many articles on a variety of subjects related to Orthopaedic diseases and two famous books, which are not only still in print but are frequently consulted by orthopaedists and pathologists. These include "Tumors and Tumorous Conditions of Bones and Joints" (published in 1958) and "Metabolic, Degenerative and Inflammatory Diseases of Bones and Joints" published in 1972.

Dr. Henry Jaffe amassed an important collection of over 3,000 Orthopaedic cases over the course of his career which also included the case collections of Dr. Jakob Erdheim, a prominent Viennese Pathologist, who before he died in 1937 was able to have his collection smuggled in a rug out of Vienna. At the death of Dr. Jaffe in 1979 these collections were given to Dr. Henry Mankin, then Chief of Orthopaedics at Massachusetts General Hospital. A collector in his own right,

Dr. Mankin has amassed thousands of histological photographic slides of his patients as well as others seen at the Orthopaedic Oncology Unit in the Orthopaedic Department at MGH. From these three sources have arisen the now very large Jaffe - Erdheim- Mankin Collection of Orthopaedic cases that include photographs, x-rays, glass plates, histologic slides and documents on metabolic diseases of bone, skeletal disorders and tumors of bone and soft tissue.

Henry J. Mankin is an Orthopaedic Surgeon who performed his residency at the Hospital for Joint Diseases in New York City from 1957 to 1960 and served as a resident with Dr. Jaffe for 5 months, just before he began his Orthopaedic training. He subsequently served at the University of Pittsburgh from 1960 to 1966, as Chief of Orthopaedics at the Hospital for Joint Diseases until 1972 when he became the Edith M. Ashley Orthopaedic Professor at Harvard and Chief of Orthopaedic Surgery at the Massachusetts General Hospital. He established a program for caring for patients with bone and soft tissue tumors and spent considerable time in research and education, until his retirement from active practice after 30 years.

Dr. Mankin treated approximately 15,000 patients during his tenure as department chief at MGH and published approximately 680 articles and 2 books on the subjects of bone and joint disease. He has established a database for the collection and storage of general information regarding over 19,000 patients treated by him and his associates. Table 1 illustrates the outline of information collected in this database. In

<b>TABLE 1. Computerized data from Mankin-MGH Orthopaedic Data base</b>	
Name:	Surgery A:
Age:	Surgery B:
Date:	Surgery C:
Sex:	Surgery D:
Unitno:	XRT:
Photono:	Chemo
Diagnosis:	MD:
Site:	Hospital:
PMD:	Death:
Stage:	Death Date:
Stage:	Remarks:

<b>TABLE 2. Examples of Malignant Tumors</b>		
	Jaffe Cases	Mankin Cases
Adamantinoma	14	7
Chondrosarcoma	187	136
Ewings Sarcoma	35	29
Lymphoma	205	35
Myeloma	75	10
Osteosarcoma	210	68

In addition there are over 5,000 2x2 slides of histology and x-rays of his and his associate's patients collected from over his 30 years in practice and are being digitized. It should be noted that much of our current digitized collection is from the Jaffe material. To date the entire Jaffe/Erdheim collections have been digitized and current efforts are concentrated on the Mankin collection.

The purpose of this work is to preserve the material in these Orthopaedic cases and to make the images available to the medical community at large through access on the web.

**Current Material which has been digitized**

A total of 3850 Jaffe cases are included in our Imaging project resulting in over 19,000 digitized images. Thus far, over 900 Mankin cases have been included with over 2600 images all taken from 2 X 2 slides. Examples of cases organized by diagnosis for both series are shown in Tables 2,3 and 4.

The material which comes from several of the cases from both groups is shown in Figures 1, 2, 3 and 4. These are digitized material made from the Jaffe case studies or the Mankin 2 X 2 slides.

<b>TABLE 3. Examples of Benign Tumors</b>		
	Jaffe Cases	Mankin Cases
Giant Cell Tumor	153	39
Enchondroma	75	12
Osteoblastoma	48	0
Neuroblastoma	57	28
PVNS	65	16
Paget's Disease	123	51

<b>TABLE 4. Examples of Other Diseases</b>		
	Jaffe Cases	Mankin Cases
Gaucher Disease	5	67
Osteoporosis	33	7
Osteomyelitis	142	25
Osteonecrosis	75	10
Rickets	21	3
Syphilis	25	1

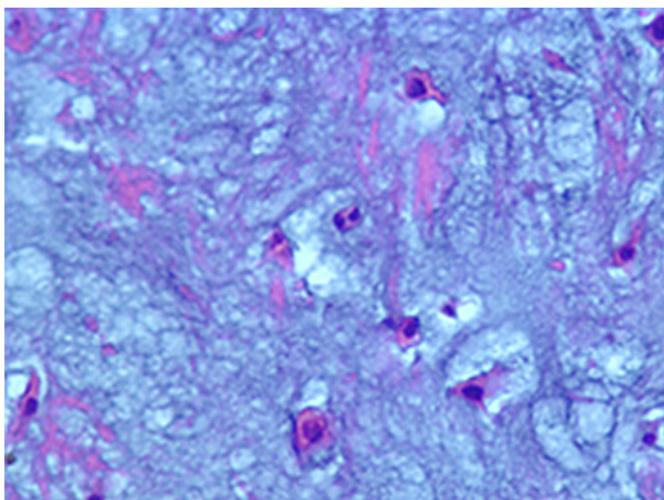


FIGURE 1. Chondrosarcoma from the Jaffe collection

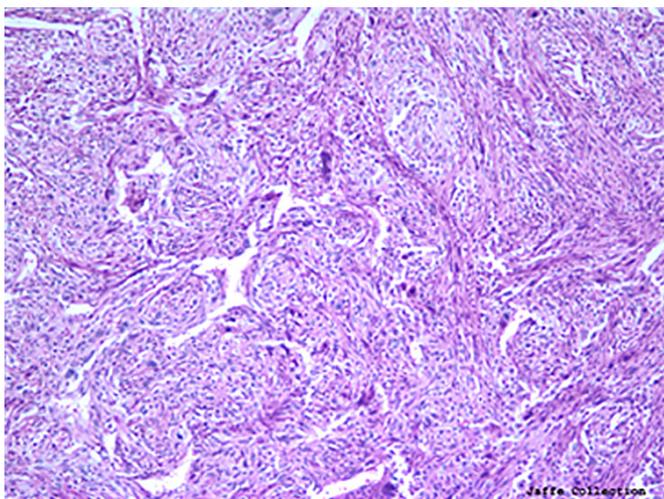


FIGURE 2. Osteosarcoma from the Jaffe collection



FIGURE 3. Ewings from the Mankin Collection



FIGURE 4. Gaucher's disease from the Mankin Collection