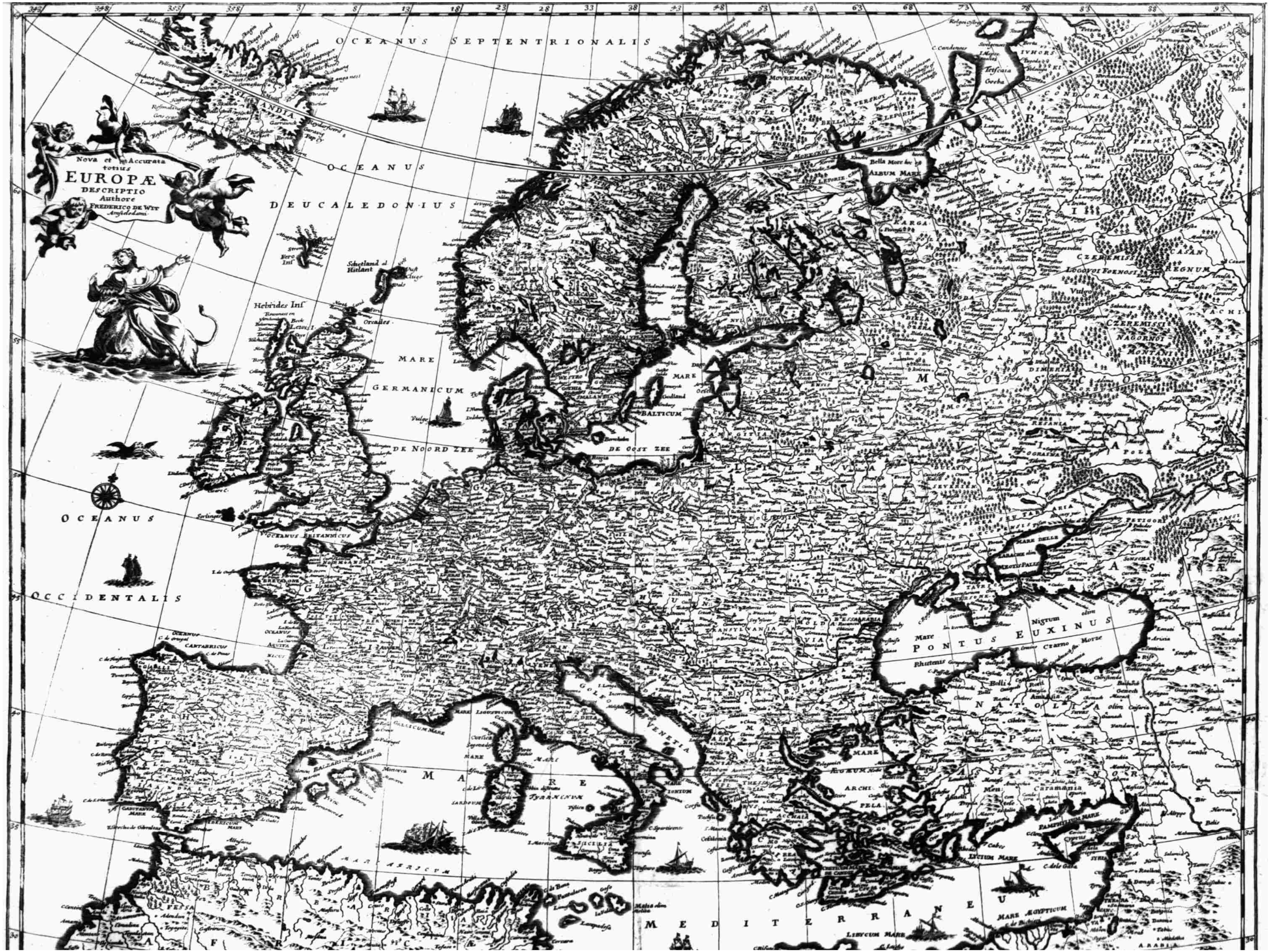
Menton-The Spleen

Andrew Lister

The Spleen+ Lymphoma

- Is it ‘enlarged’?
- Is it ‘involved’?
- How do you know?

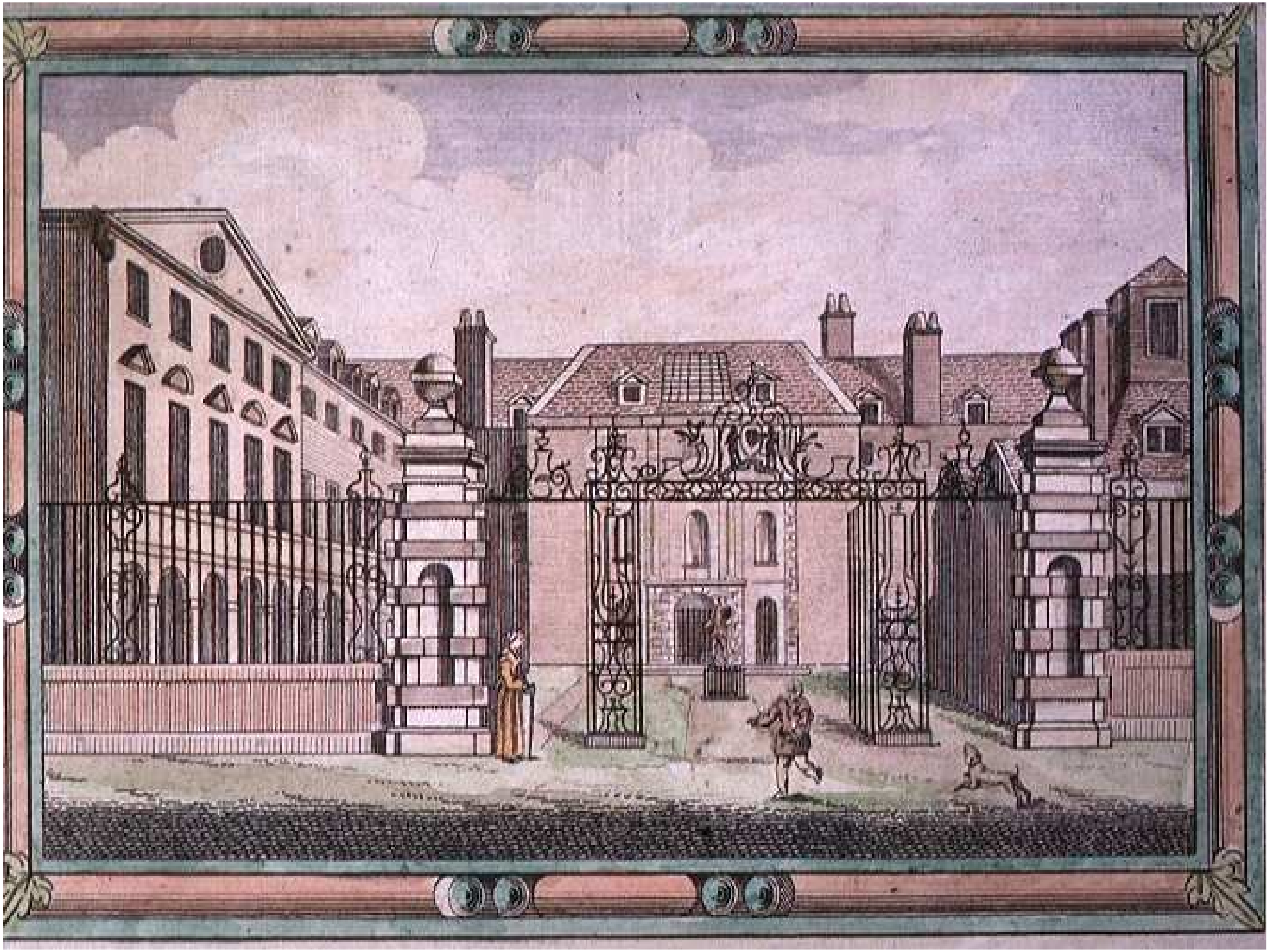
DOES IT MATTER?

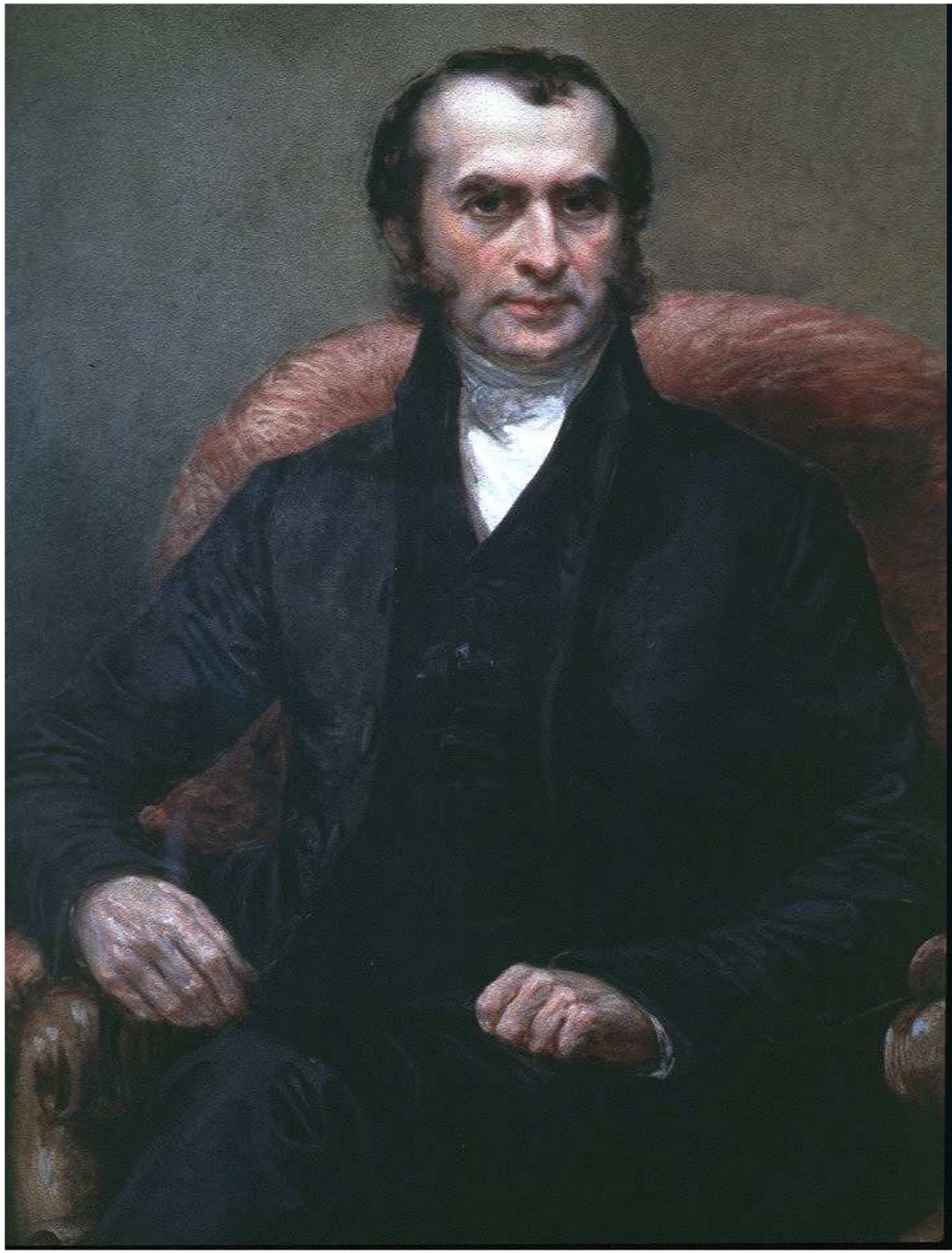

Nova et Accurata totius
EUROPÆ
DESCRIPTIO
Authore
FREDERICO DE WIT
Amstelodami
OCEANUS SEPTENTRIONALIS
OCEANUS
DEUCALEDONIUS
MARE
GERMANICUM
DE NOORD ZEE
OCEANUS
OCCIDENTALIS
OCEANUS BRITANNICUS
Hebrides Insl
Schetland al Hitlant
Orcades
ISLANDIA
MARE
BALTICUM
DE OOST ZEE
Bella More bez
ALBUM MARE
Mare
PONTUS EUXINUS
Nigrum
NATOLIA
MARE
TYRRHENUM
MEDITERRANEUM
MARE ÆGYPTICUM

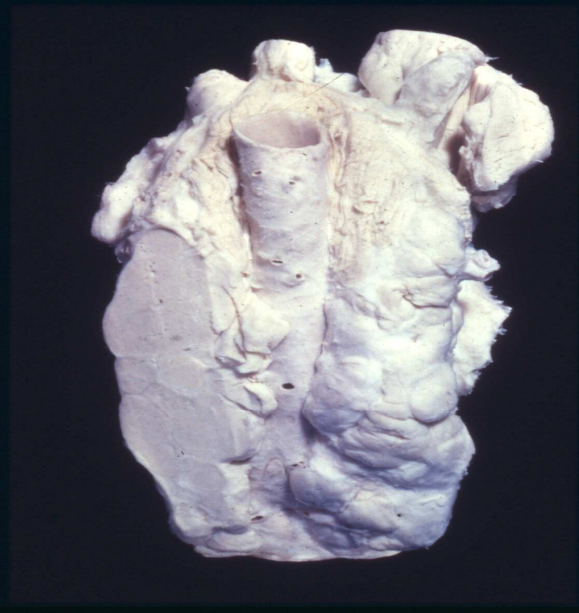
Malpighi, Marcello
1628-1694

In homine difficilius emergunt: si tamen ex morbo universum glandularum genus turgeat, manifestiores redduntur, aucta ipsarum magnitudine, ut in defuncta puellla observavi, in qua lien globulis conspicuis racematim dispersis totus scatebat

In man it is with some difficulty that they arise: but if, as a result of disease, all the glands swell, they (the organs?) are rendered more obvious, with the increase of their own size. I have observed this in a dead girl whose body the spleen bubbled up, with its visible parts spread in clusters







ON SOME

MORBID APPEARANCES

OF

THE ABSORBENT GLANDS

AND

SPLEEN.

BY DR. HODGKIN.

PRESENTED

BY DR. R. LEE.

READ JANUARY 10TH AND 24TH, 1832.

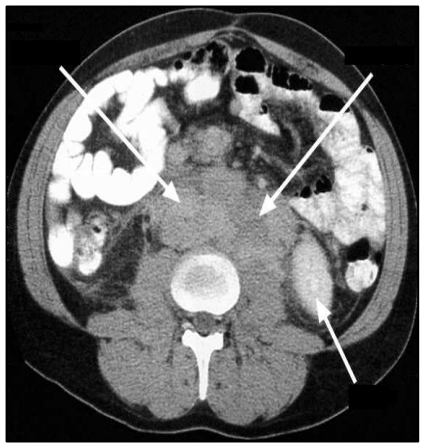
THE morbid alterations of structure which I am about to describe are probably familiar to many

Figure 1.1 Heading on cover page of Hodgkin's classical article (*Medico-Chirurgical Transactions* 17:68–114, 1832).

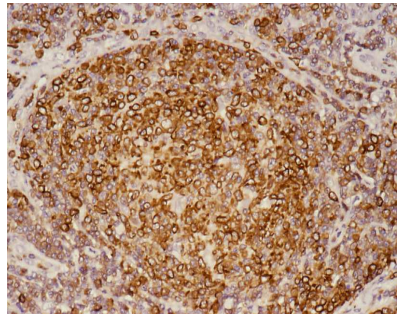
FOLLICULAR LYMPHOMA aka ‘BRILL-SYMMERS’ DISEASE

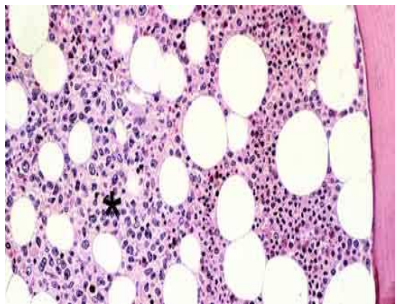
GIANT FOLLICULAR LYMPHADENOPATHY WITH OR WITHOUT SPLENOMEGALY, ITS TRANSFORMATION INTO POLYMORPHOUS CELL SARCOMA OF THE LYMPH FOLLICLES AND ITS ASSOCIATION WITH HODGKIN’S DISEASE, LYMPHATIC LEUKAEMIA AND AN APPARENTLY UNIQUE DISEASE OF THE LYMPH NODES AND SPLEEN - AN ENTITY BELIEVED HITHERTO UNDESCRIBED.

Symmers, 1938



The common faces of follicular lymphoma





THE SPLEEN

Fig. 515.—Bimanual palpation of the spleen.

The Spleen+ Lymphoma

Gall+ Mallory

n=618

SPLENOMEGALY

40% (14-56): LC 59%, HD 45%,FL 34%,.....

Gall+ Mallory AJPath,1942


1523

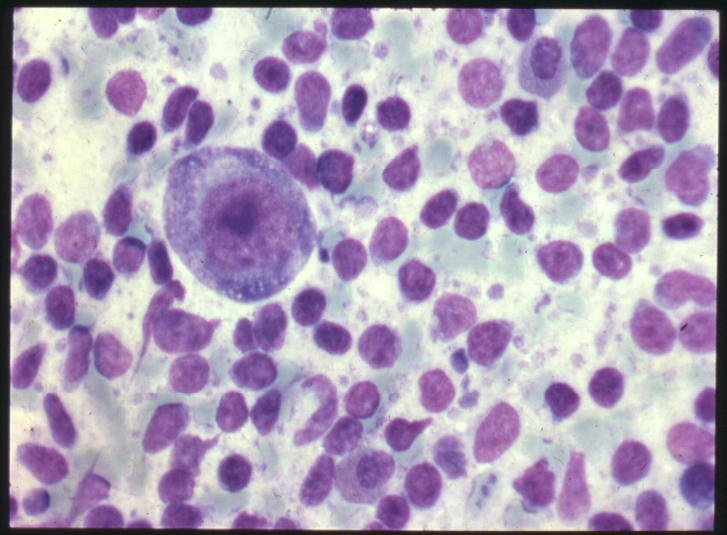
2. *Specimens illustrative of the pathology of lymphadenoma and leucocythæmia.*

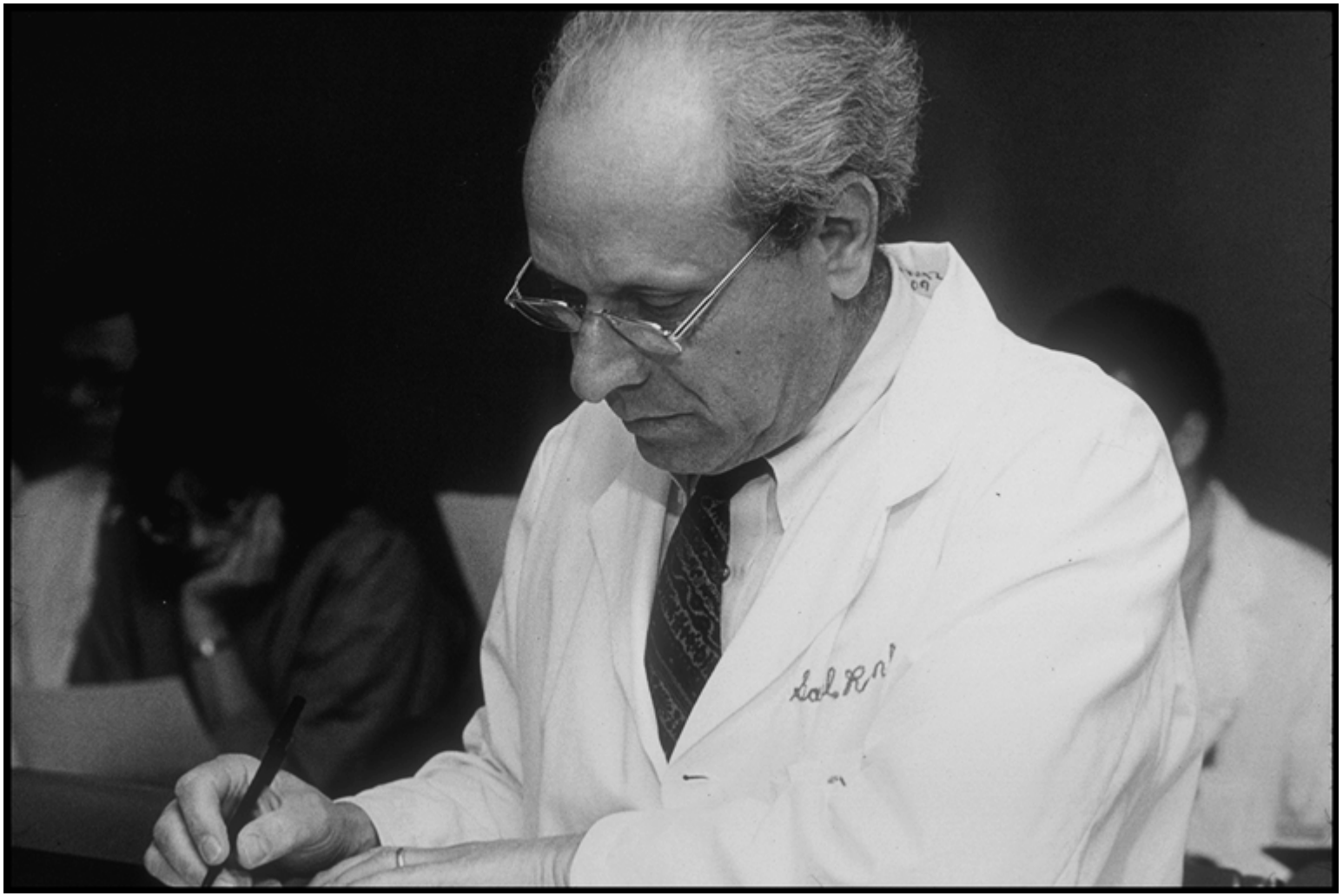
By W. S. Greenfield, M.D.

In bringing before the Society specimens illustrative of the pathology of lymphadenoma and leucocythæmia, it will be convenient to give some account of the cases from which most of the specimens are taken, then to describe the histological characters of the morbid changes in different organs, and afterwards to discuss some points in the general pathology and relations of these diseases. But in order to bring more completely into relief the morbid anatomy and histology of lymphadenoma, I have exhibited to the Society a number of specimens from other cases than those now recorded, some of which have already been shown to this and other societies, and have thus endeavoured to illustrate the several stages of the changes in various organs. Briefly to mention these, they are specimens from the liver in two cases, the spleen in three cases, the glands in three cases, and drawings of the naked-eye appearances of the liver and spleen in typical cases. The microscopic specimens were selected from sections of the glands in various parts of the body in seven cases, from the spleen in seven cases, the liver in two, and the skin in two, and also from growths in the omentum, the lungs, &c. Together with these, microscopic drawings illustrative of some of the most important changes are shown.

I have been able only to bring one case of leucocythæmia, of which specimens and drawings from the liver, spleen, and kidney, and microscopic sections and drawings from the same organs, are shown.

Cover page of the 1878 paper by Greenfield, which, together with that of Langhans (1872), contained the first known descriptions of the characteristic binucleate or multinucleate giant cells of Hodgkin's disease, recognition of which is now usually erroneously credited to Sternberg (1898) and to Dorothy Reed (1902), and named after them.





The Spleen+ Lymphoma

Rosenberg et al

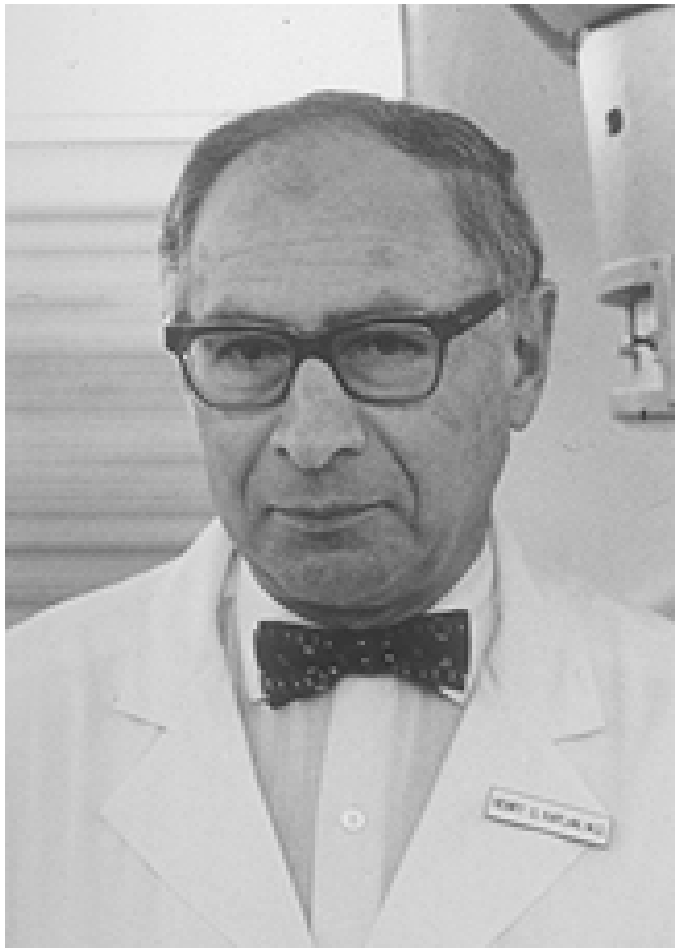
(n=1269)

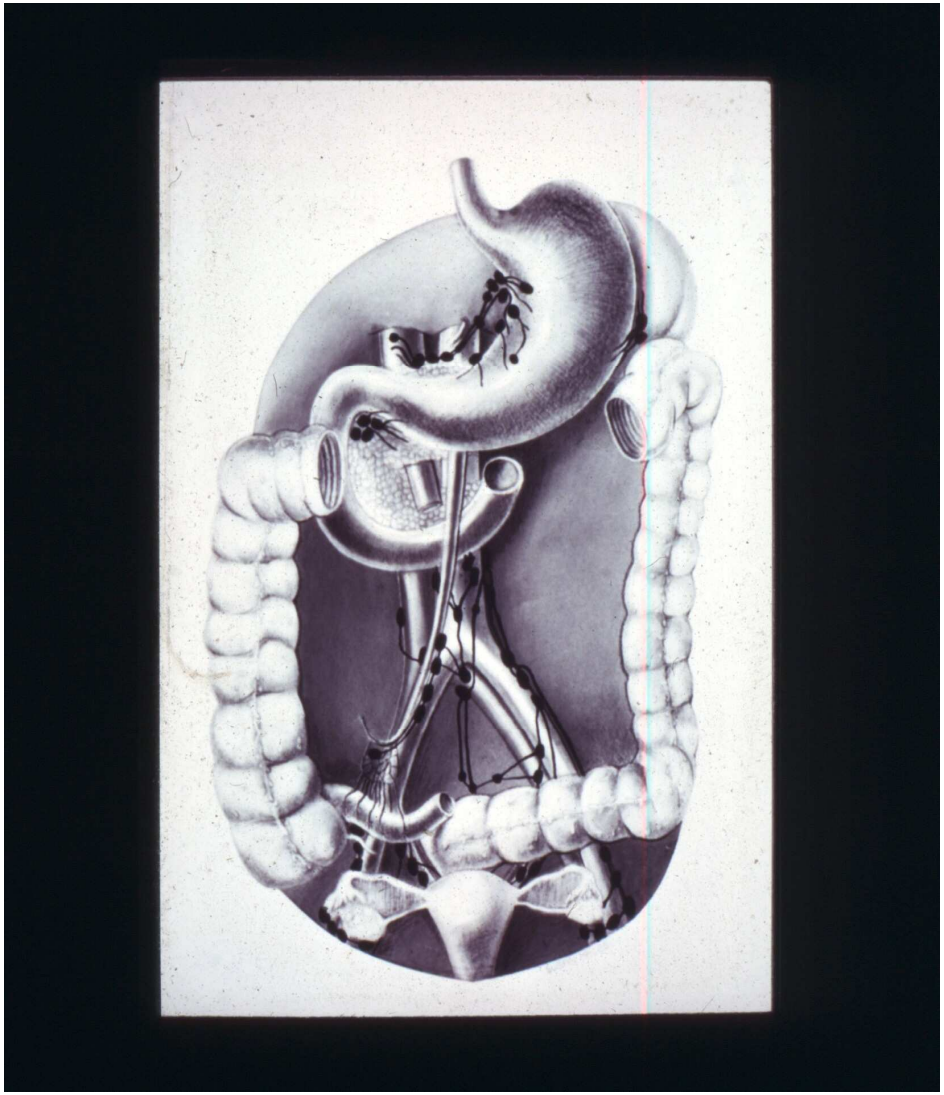
Evaluation of hepatosplenomegaly in LSA

	Spleen %	Liver
PM +ve	54	51
% of these enlarged	59	57
PM -ve Palpably enlarged	29	39

Rosenberg et al, Medicine,1961

STANFORD





A clinical syndrome

The Spleen+ Contiguous LN Involvement in HL

Table 7.6 Contiguity of Lymphatic Sites of Involvement in 340 Untreated Patients with Hodgkin's Disease

Site	Total number instances involved	Sole site involved	Additional sites involved	Anatomic relationship to other sites		
				Noncontiguous	Contiguous	% contiguous
1. Right axillary nodes	78	5	73	8	65	89
2. Left axillary nodes	90	3	87	3	84	97
3. Right cervical-supraclav. nodes	199	12	187	1	186	99
4. Left cervical-supraclav. nodes	241	23	218	6	212	97
5. Mediastinal nodes	211	5	206	1	205	99.5
6. Hilar nodes	39	0	39	0	39	100
7. Para-aortic nodes	114	1	113	1	112	99
8. Iliac, inguinal, femoral nodes	54	5	49	1	48	98
9. Spleen	44	0	44	5	39	88

[a]Adapted, with the permission of Academic Press and the Harvey Society, from Kaplan (1970).

Stanford data,Kaplan

SPLEEN WEIGHT vs HISTOLOGY: HL

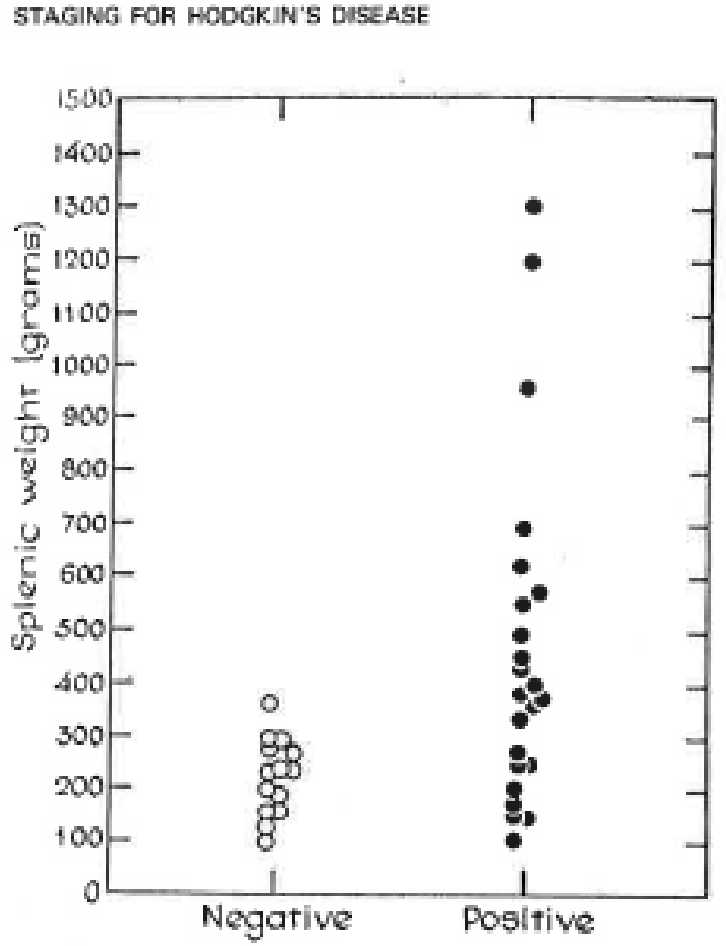
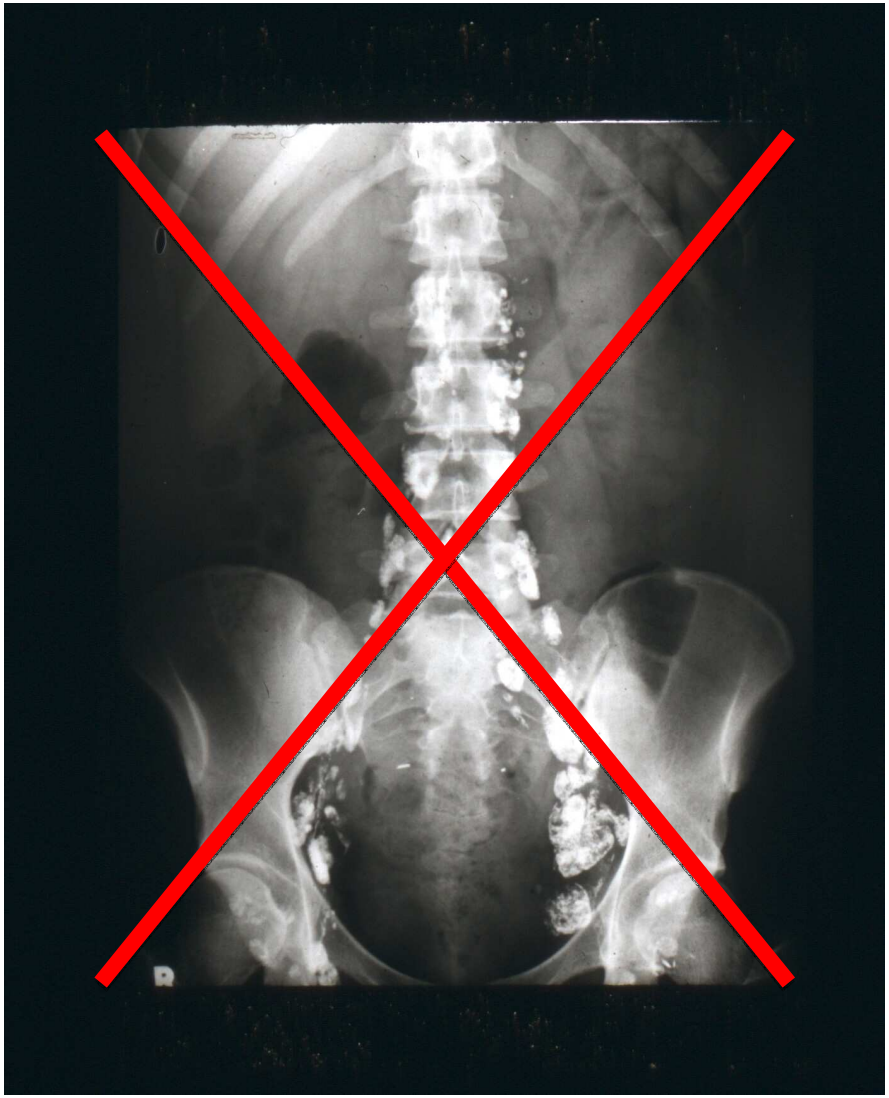


Fig 3. Lack of close correlation between spleen size and histological involvement. Reprinted with permission.[27]

Stanford data,Glatstein et al, Cancer 1969,also Barts,RMH

GOODBYE LYMPHANGIOGRAM!



The Spleen: CT vs Histology:HL

Table 5. Correlation Between Computed Tomography, Lymphography, and Histology

	Para-aortic Nodes		Mesenteric Nodes	Spleen	Liver
	LG (%)	CT (%)	CT (%)	CT (%)	CT (%)
Accuracy					
Overall	102/107 (85)	93/107 (87)	90/92 (98)	70/121 (58)	118/121 (98)
Positive report	17/19 (98)	13/20 (65)	0/1 (0)	17/34 (50)	1/1 (100)
Negative report	85/88 (97)	80/87 (92)	90/91 (99)	53/87 (61)	117/120 (98)

Reprinted with permission.[44]

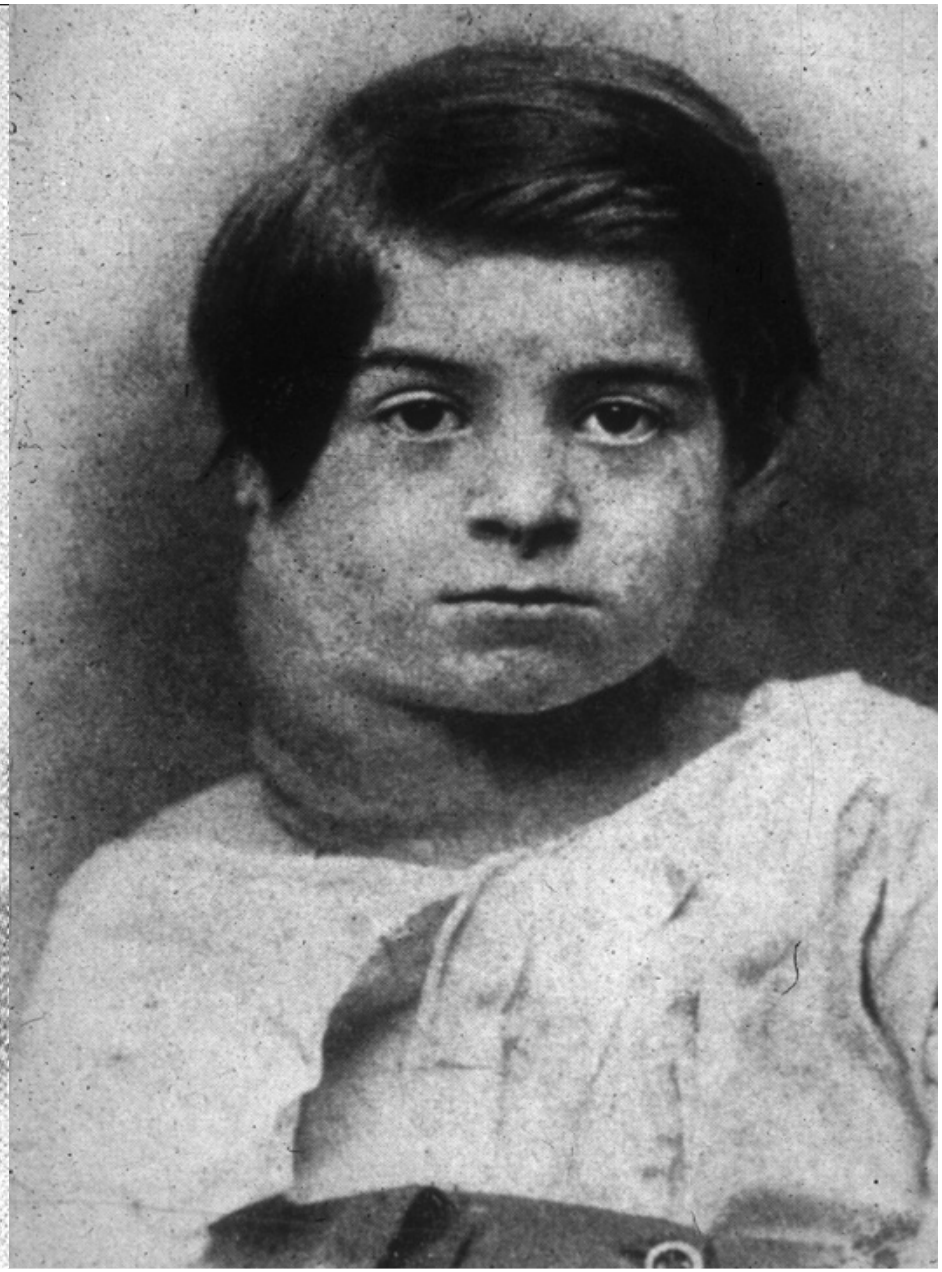
Stanford data,Castellino et al Am J Roent. 1984

And in UK…

LAP+	CT-	CT+	CT false +
23	18	5	1

Christie data,Crowther,Blackledge+Best,Clinics in Haematology 1979

VIRCHOW



STAGING LAPAROTOMY for NHL

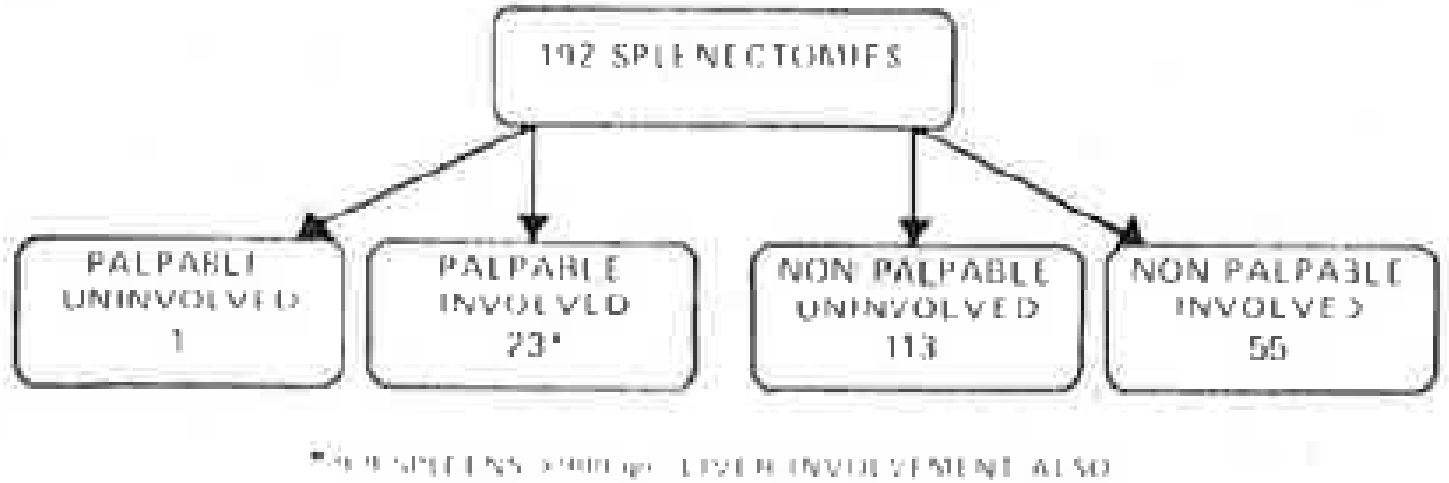


FIGURE 9.—Splenic findings; 5 patients did not have splenectomy (*see* Results section).

Stanford data, Goffinet et al,Cancer Treatment Reports 1977

SPLEEN WEIGHT vs HISTOLOGY: NHL

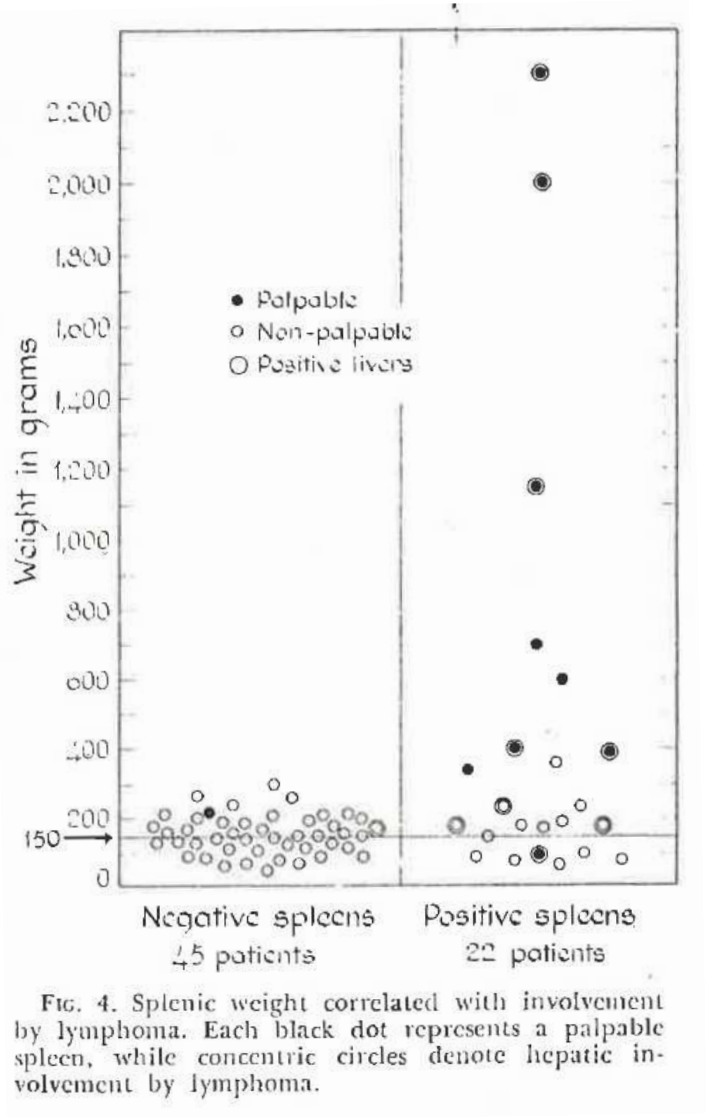


FIG. 4. Splenic weight correlated with involvement by lymphoma. Each black dot represents a palpable spleen, while concentric circles denote hepatic involvement by lymphoma.

Stanford data,Goffinet et al,Cancer 1973

SPLEEN WEIGHT vs HISTOLOGY: NHL

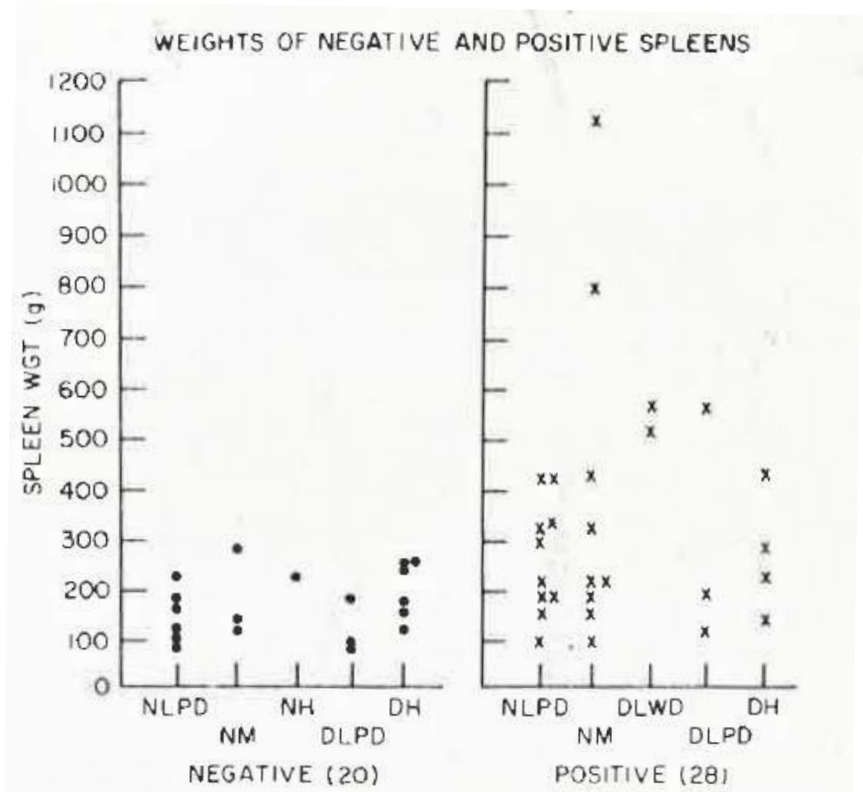
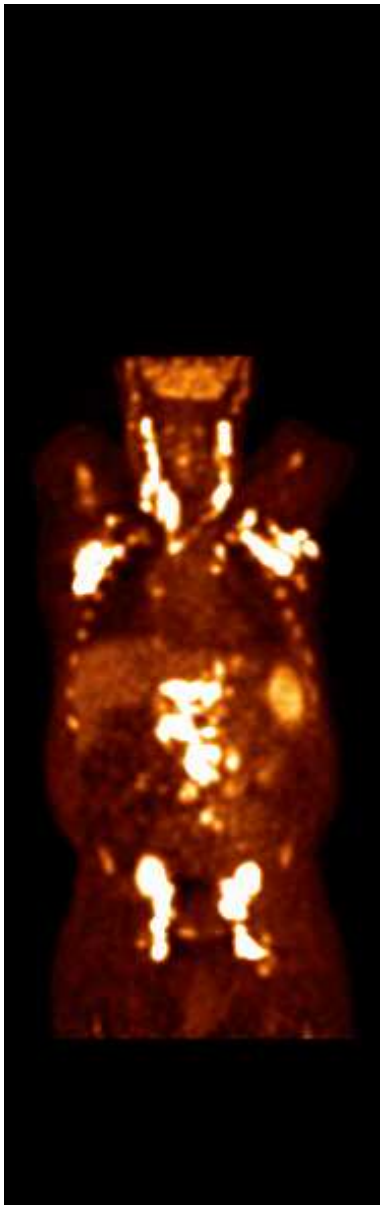


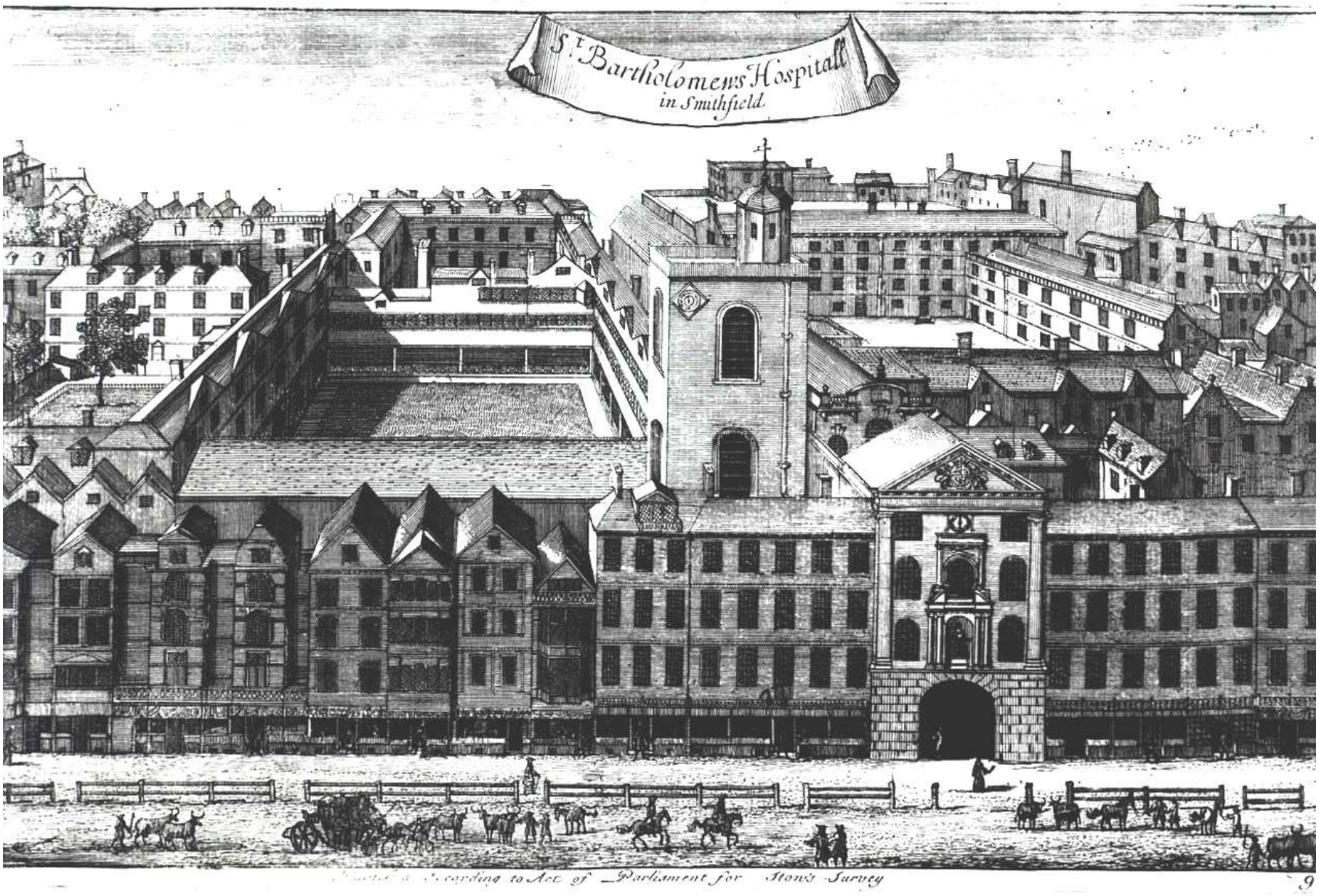
FIG. 2. Weights of negative and positive spleens. One negative spleen, removed at another hospital, is not tabulated due to inadequate information.

NCI data, Lotz et al,Cancer 1976

PET/CT



Medical Invention of the year in TIME magazine 2000
Dr David Townsend and Dr Nutt



ST. BARTHOLOMEW'S HOSPITAL - FOUNDED 1123A.D. FOR 'SICK POOR OF LONDON'

Acknowledgments

Barts Cancer Institute

Greg Wolf Fund