

# Identification and classification of diseases

Lennart Nordenfelt

Thomas Sydenham (1624-1689)

François Sauvages (1706-1767)

*Sauvages:*  
*Nosologia methodica*

1763

Xavier Bichat (1771-1802)

Rudolph Virchow (1821-1902)

# Aretaeus of Cappadocia

## 200 BC

Diabetes is a wonderful affection, not very frequent among men, being a melting down of the flesh and limbs into urine ... the patients never stop making water, but the flow is incessant, as if the opening of aqueducts ... life is disgusting and painful; thirst unquenchable; excessive drinking, which however is disproportionate to the large quantity of urine, for more urine is passed; and one cannot stop them either from drinking nor making water. (*Aretaeus* 1856, p.338)

Claude Bernard, ca 1850:  
Diabetes is a disturbance of the normal metabolism,in the sense that an excess of sugar is excreted into the urine.

Oskar Minkowski, ca 1890:  
Diabetes is a disturbance of the normal metabolism, in the sense that an excess of glucose is excreted into the urine. This disturbance is caused by a defective functioning of the pancreas.

# Frederick Banting and Charles Best, 1921:

Diabetes is a disturbance of normal metabolism, in the sense that an excess of glucose exists in the urine. This disturbance is caused by reduced secretion of insulin from the Langerhan islands in the pancreas.

George F. Cahill, 1976:  
Diabetes is a constellation of anatomic  
and biochemical abnormalities which  
have in common a disturbance in  
glucose homeostasis, caused by a  
deficiency in the beta cells of the  
endocrine pancreas.

Tabellverket 1749

[The Swedish Statistical  
Bureau]

# William Farr (1807-1883)

## General Register Office

Jaques Bertillon (1851-1922):

First International Classification  
of Causes of Death (1893)

# International Classification of Diseases and Related Conditions ICD 10, 1992



I Certain infectious and parasitic diseases

II Neoplasms

III Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism

IV Endocrine, nutritional and metabolic diseases

V Mental and behavioural disorders

VI Diseases of the nervous system

VII Diseases of the eye and adnexa

VIII Diseases of the ear and mastoid process

IX Diseases of the circulatory system

X Diseases of the respiratory system

XI Diseases of the digestive system

XII Diseases of the skin and subcutaneous tissue

XIII Diseases of the musculoskeletal system and connective tissue

XIV Diseases of the genitourinary system

XV Pregnancy, childbirth and the puerperium

XVI Certain conditions originating in the perinatal period

XVII Congenital malformations, deformations and chromosomal abnormalities

XVIII Symptoms, signs and abnormal clinical and laboratory findings not elsewhere classified

XIX Injury, poisoning and certain other consequences of external causes

XX External causes of morbidity and mortality

XXI Factors influencing health status and contact with health services

XXII Codes for special purposes

# Systematized Nomenclature of Pathology (SNOP) 1965



Topography  
Morphology  
Aetiology  
Function



# The International Systematized Nomenclature of Human and Veterinary Medicine

SNOMED

In 2010:

291,000 concepts

758,000 ordinary language descriptions

823,000 defining relationships

The  
Is a relationship



The root concept:

*Clinical Finding*

# Defining attribute relationships, e.g.:

*Finding site*

*Causative agent*

*Clinical course*

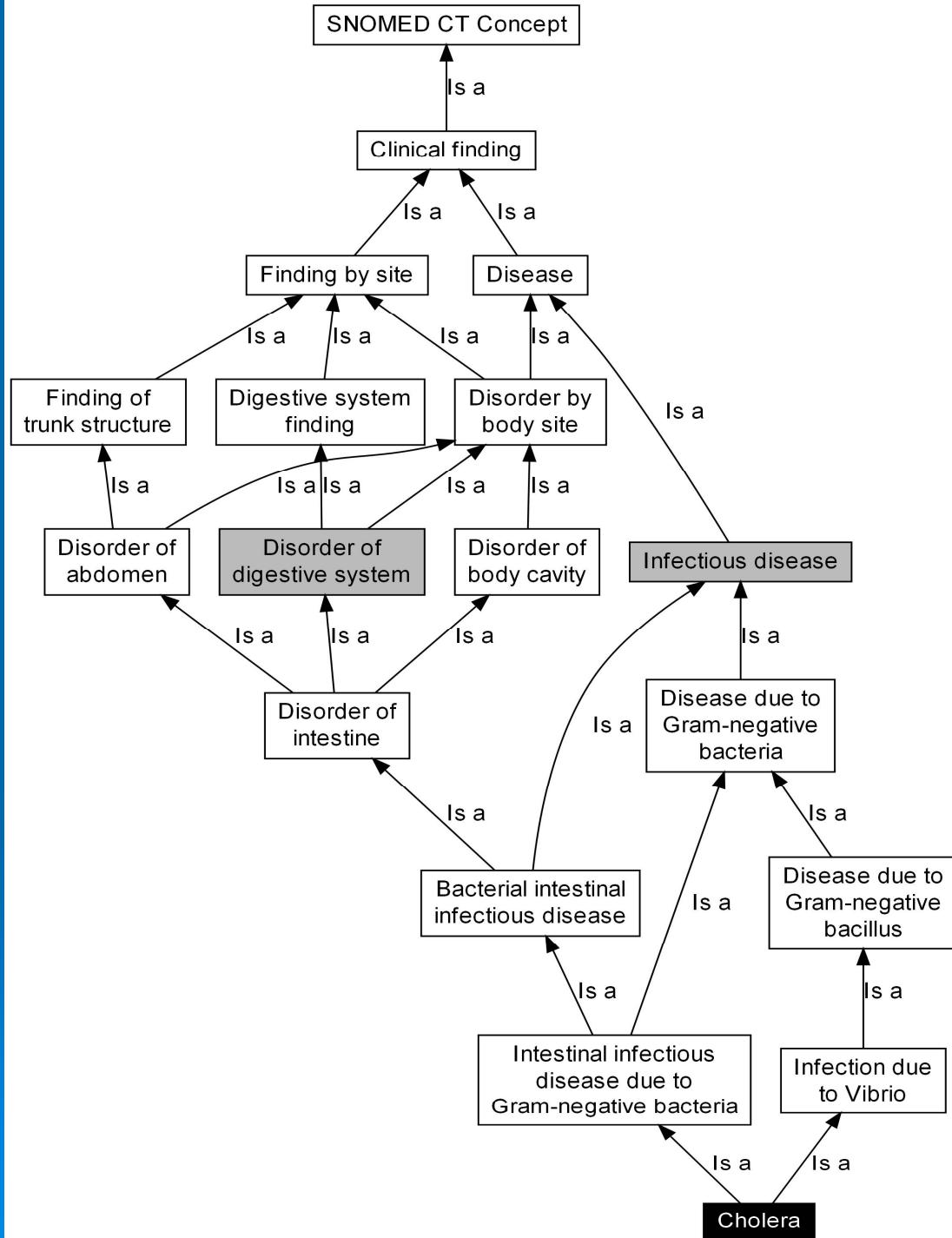
*Pathological process*

Cellulitis

Disorder of foot

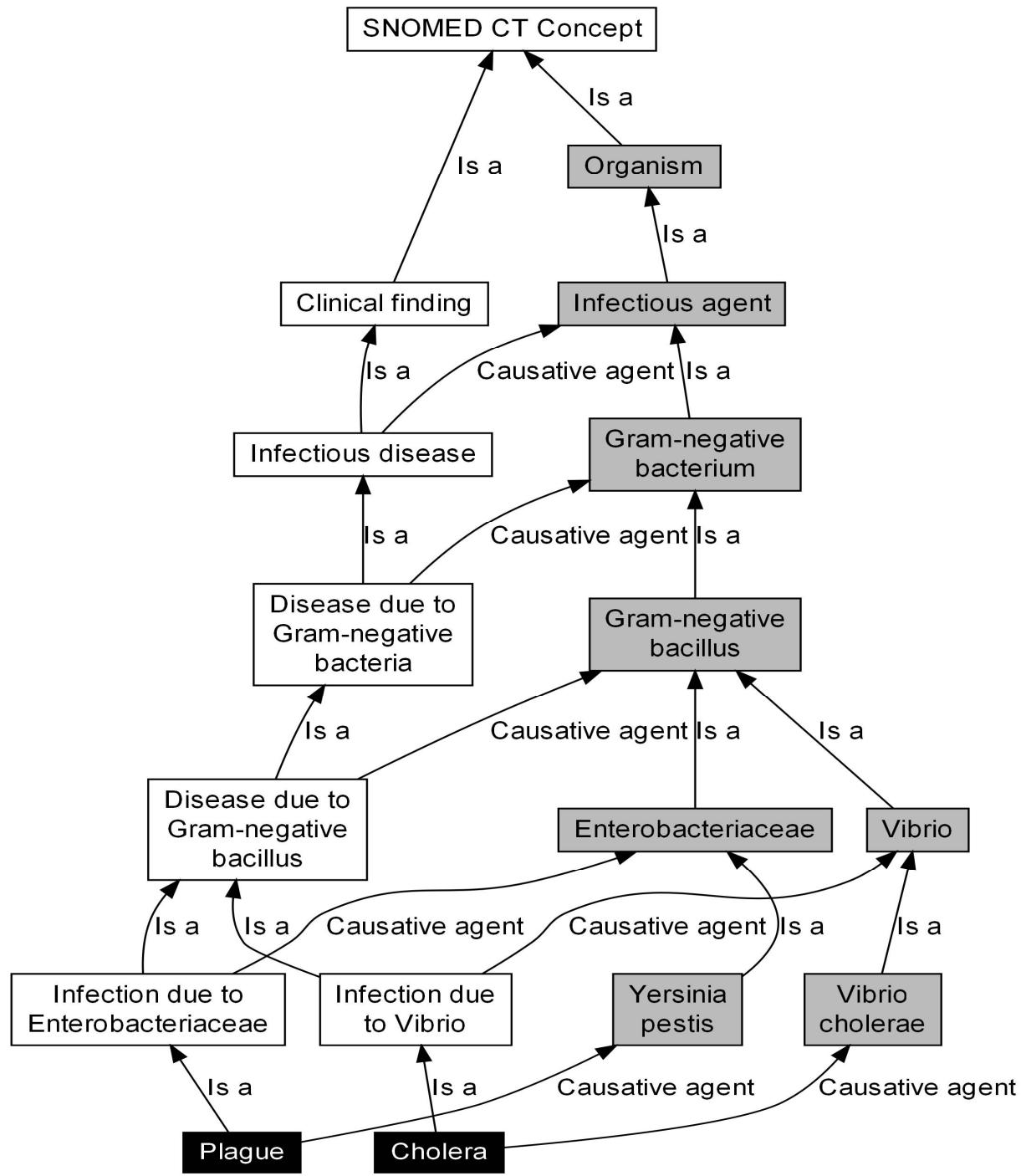
Cellulitis of foot





Is there an ultimately privileged classification?





# Physiologists

# Ontologists