



Eponyms in Pathology- A Review

Aleena Alex^{a#}, R. Priyadharshini^{b*≡} and Palati Sinduja^{b≡}

^a Saveetha Dental College and Hospital, Saveetha Institute of Medical and technical sciences (SIMATS), Saveetha University, Chennai, 77, Tamil Nadu, India.

^b Department of Pathology, Saveetha Dental College, Saveetha Institute of Medical and Technical Sciences (SIMATS), Saveetha University, Chennai, 77, Tamil Nadu, India.

Authors' contributions

This work was carried out in collaboration among all authors. Author AA carried out the literature searches, data collection, data analysis and manuscript writing. Authors RP and PS conceived the study, participated in its design, coordinated and provided guidance to draft the manuscript. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/JPRI/2021/v33i60B35056

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/80280>

Review Article

Received 07 December 2021

Accepted 27 December 2021

Published 28 December 2021

ABSTRACT

Eponyms in medicine have been used widely, as an alternate between the non-possessive and possessive forms. They are used in medicine for better understanding. It also indicates invention, substance with similar appearance, institution name etc., who have discovered or to commemorate their contribution. An extensive review of literature of Eponyms in Pathology by a collection of data from PubMed, Cambridge core, google scholar, Cochrane, and semantic scholar-based medicine articles collected from 2020 - 2021. Articles were searched with a keyword like "Eponyms in pathology and Appearance in pathology". Those articles about pathological eponyms are included as study reference. Non indexed and poor grammatical articles were excluded. From which data was analysed to interpret the results. The objective of this study was about the understanding and recognizing the complex pathological patterns.

Keywords: *Eponyms; pathology; syndromes.*

[#] Graduate;

[≡] Assistant Professor;

*Corresponding author: E-mail: priyadharshinir.sdc@saveetha.com;

1. INTRODUCTION

An eponym may be a place, person or factor when somebody or one thing is known as. It can be pathological and anatomical eponyms within the organic process systems. Elite eponyms of the gastrointestinal system pathology were reviewed [1]. The remarks close to the terms and eponyms within the gastrointestinal system are not different from those encountered in medication normally. Eponyms don't continually mirror or describe the condition. Additionally, it helps in remembering the conditions based on its appearance as an added advantage in avoiding the confusion [2].

2. DIGESTIVE SYSTEM PATHOLOGY EPONYMS

Barrett's muscular structure: Given to a columnar epithelium of muscular structure (CLE) that was understood by thirty different eponyms and terms. Condition wherever abnormal or metaplastic modification within the membrane of the lower portion of muscular structure, from traditional squamous epithelial tissue to columnar epithelial tissue with goblet cells interspersed that area unremarkably gift solely within the bowel [3]. Named after Australian pectoral sawbones Rupert Barrett (1903–1979).

Boerhaave's syndrome: A musculature perforation that occur due to regurgitation. Conditions were related to high mortality, morbidity and was fatal while not treated. Boerhaave (1668-1738) of World Health Organisation have first documented the syndrome. Mallory-Weiss syndrome a rare syndrome, which is barely a membrane tear [4].

Budd–Chiari syndrome – A very rare condition caused by hepatic vein occlusion that drains liver. Classical triad like ascites, abdominal pain and enlargement of liver were present. It also presents with the classical triad of abdominal pain, ascites, and liver enlargement. British Physician George Budd M.D. (1808 – 1882) and Hans Chiari (1851 – 1916), Austrian pathologist names were given [5].

Caroli syndrome – Named after French gastroenterologist Jacques Caroli who had identified ectasia (or cystic dilatation) of bile duct in liver.

Councilman body - The apoptotic body, also defined as the globular acidophilic cells which

represents the dying hepatocytic cells and is found in the liver of persons suffering from yellow fever, hepatitis and other viral diseases. William Thomas Councilman an American pathologist, is an acidophilic globule of cells that represents a dying hepatocyte and is identified in the liver of people who suffer from viral hepatitis (acute), yellow fever or other viral syndromes. Councilman bodies are named after American pathologist William Thomas Councilman (1854-1933), who had discovered them [6].

Crohn's disease - Inflammatory bowel disease (IBD) called as Crohn's disease of the digestive tract. Burrill Bernard Crohn was an American gastroenterologist have identified the inflammatory disease extending to the intestines [7].

Cruveilhier–Baumgarten disease - The condition in which distension of the paraumbilical or umbilical veins caused due to portal hypertension and liver cirrhosis known as Cruveilhier–Baumgarten disease (Pégot-Cruveilhier–Baumgarten disease). Pégot in 1833 and French pathologist and anatomist Paul Clemens and Jean Cruveilhier described the disease [8,9].

Gardner syndrome- Gastric adenocarcinoma or Turcot syndrome or proximal polyposis of stomach, a familial adenomatous polyposis (FAP), due to adenomatous polyposis coli gene mutation (APC) a rare autosomal dominant genetic disorder with numerous adenomatous polyps progress to colorectal carcinoma [10] Was named after Eldon J. Gardner in 1951 [11].

Ivemark's syndrome - Renal-Hepatic-Pancreatic dysplasia syndrome. Hepatic dysgenesis, Pancreatic fibrosis and renal dysplasia are the clinical features of this autosomal recessive syndrome. In 1959, Pathologist Biörn Ivemark and Swedish pediatrician (1925–2005) named it as "familial dysplasia of liver, kidneys, and pancreas [12]". Also named as Renal-hepatic-pancreatic dysplasia and polycystic dysplasia [13].

3. FOOD EPONYMS IN PATHOLOGY

Acute cake appearance: Described by Richard Shannon (1794) to describe spleen enlargement seen in malarial infection [14,15]. Almond-shaped organ: Normal Ovary in gross appearance. Anchovy sauce pus: Brown coloured odourless pus in amoebic liver abscess. Apple green birefringence: Birefringence

exhibited by amyloid due to congo red stain in polarised light. Apple green sputum: Pneumonia caused by Influenza exhibit green colour sputum. Apple jelly nodules: Brownish red lesion similar to gelatin consistency in Lupus vulgaris [16].

Banana shaped: Plasmodium falciparum exhibits a gametocyte of crescent shape which facilitates early sequestration of gametocyte and circulation of gametocytes in its late stage in the blood without its filtration by the spleen [17,18]. Berry aneurysm: Cerebral vessels exhibits saccular aneurysm at the junction of circle of willis. Blueberry muffin baby: Dermal hematopoiesis reported in infants with purpura on head, neck and trunk regions due to extramedullary areas of hematopoiesis in TORCH syndrome which includes Toxoplasmosis, other, rubella, cytomegalovirus and herpes infection, neonatal neuroblastoma, Langerhans cell histiocytosis, congenital leukemia cutis and neonatal neuroblastoma, rhabdomyosarcoma and Langerhans cell histiocytosis [19,20]. Bread and Butter appearance: Fibrinous exudate deposition on pericardium due to inflammation leads to its shaggy appearance.

Café au lait spots: These are well-circumscribed, patchy or evenly pigmented macules are seen in healthy children commonly in neurofibromatosis type 1. Carrot-shaped nuclei: Scanty cytoplasm and abundant chromatin in medulloblastoma, a malignant embryonal tumour of childhood in cerebellum [21]. Cauliflower-like appearance: Gross appearance of condyloma acuminata, a genital warts transmitted sexually by Papilloma virus of the sexually transmitted genital warts (condyloma acuminata) caused by the human papillomavirus. Also describe the cauliflower growth exhibited by squamous cell carcinoma. Cheesy appearance: Gross appearance in caseous necrosis in Tuberculous granuloma with release of lipid like substance from the cell wall of Mycobacterium infection and also in some fungal infection [22].

4. FRUIT EPONYMS IN PATHOLOGY

Apple jelly nodules: Yellow brown macules of granulomas in lupus vulgaris on diascopy in a granulomatous lesion of sarcoidosis and leishmaniasis [23]. Bean bag cells are Cytophagic Histiocytic panniculitis cells filled with red blood cells, white blood cells, platelets and nuclear fragments gives them "bean-bag" like appearance on histopathology [23,24]. Bean's syndrome: Soft, purple/blue, dome shaped, soft,

compressible nodules are seen. Blackberry stomatitis: Para coccidioidomycosis, infects mucous membrane of oral cavity, accompanied with granulomatous and adenopathy lesions which bleeds and resembles blue berry [25]. Blueberry muffin baby: Neonatal purpura due to cytomegaloviral infection on first or second trimester of pregnancy. Undifferentiated mesenchyme develops nodules or papules on 4-6th week.

Cayenne pepper spots: Brown or orange pigmentation as a result of hemosiderin pigmentation seen in purpuric dermatosis [26]. Champagne bottle leg: Lipodermato sclerosis of leg in subcutaneous fibrosis were leg gives an inverted bottle like appearance. Cherry angiomas: Rounded papules resembling ruby red like appearance in vascular anomalies. Cornflake sign: Flegel's disease and Kyrle's disease shows discrete polygonal papules with irregular margins of around 2-3millimeter in size. Curry-Hall syndrome is characterised by dental anomalies as well as short limbs, polydactyly, and nail dysplasia. Asymmetrical facial appearance, craniosynostosis, preaxial polysyndactyly, agenesis of the corpus callosum, and peculiar skin with streaky patches of atrophy are all symptoms of Curry Jones syndrome [27].

Doughnut sign: On the expanded proximal interphalangeal joint, there is a central depression surrounded by a raised rim of skin. Scleromyxedema show doughnut sign. Fried egg: In unusual nevi, the central elevation may resemble a sunny side up cooked egg. Garlic clove fibroma: Acquired periungual fibrokeratoma or acquired digital fibrokeratoma are two types of acquired fibrokeratoma. Asymptomatic benign fibromas forming in the eperiunguium, especially at the proximal matrix, with a hyperkeratotic tip and narrow base [28]. Our team has extensive knowledge and research experience that has translate into high quality publications [29-48].

5. CONCLUSION

The use of eponyms typically makes a pathologist's time-consuming job easier. The analogical mode of thinking aids us in learning and remembering information more effectively. This makes a difficult task more bearable and convenient.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

SOURCE OF FUNDING

The present project is supported by

- Saveetha Institute of Medical and Technical Sciences
- Saveetha Dental College and Hospitals, Saveetha University

ACKNOWLEDGEMENT

The authors would like to thank Saveetha Dental College, SIMATS for providing a platform to conduct this research.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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