

# Eponyms and Descriptive Names in Plastic Surgery

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## Abstract

There are several eponyms and descriptive terms used in Medicine and there is ongoing debate about their usefulness. Plastic Surgery perhaps has more descriptive terms, due to visible nature of the pathology and the several innovative surgical procedures described. There has never been an attempt to classify these terms. This article attempts to classify them and also briefly discusses the origins of some of the commonly used terms.

*Key words: Eponyms, Plastic Surgery*

## Eponyms and Descriptive Names in Plastic Surgery

Persons attempting to find a motive in this narrative will be prosecuted;

Persons attempting to find a moral in it will be banished;

Persons attempting to find a plot in it will be shot.

*-Mark Twain (Adventures of Huckleberry Finn)*

Eponyms and descriptive names continue to be used in medical parlance despite the debates about their utility.<sup>1-5</sup> They are particularly popular in Plastic Surgery, due to the externally visible nature of many of the lesions encountered and also the numerous innovative procedures employed. Eponyms are used to describe diseases, clinical signs, syndromes, surgical procedures, instruments and also numerous flaps. Though there are eponyms and descriptive names derived from various flora and fauna, both real and fictional, there has never been an attempt at classifying them.

This paper looks at some of these eponyms and descriptive names within Plastic Surgery

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and attempts to categorise and propose a classification for them, which to the best of our knowledge has never been attempted before (Table 1).

Table 1: Classification of Eponyms and Descriptive terms in Plastic Surgery

• Names from places
• Names from professions and hobbies
• Names from people
○Medical
○Non-Medical
• Names from fictional characters
• Names from flora
• Names from fauna

Though this classification has been derived from eponyms popular in Plastic Surgery, the same can be applied to those from other medical and surgical disciplines as well. The authors are acutely aware that many of these terms are politically incorrect in the current practice and by no means advocate using them while communicating with patients. They do however have a historic and literary value and do add some flavour to the otherwise mundane medical jargon. Though an eponym, strictly speaking, is 'a name derived from the name of a real or mythical person,' in the context of this article, the term is used loosely to include names and descriptive terms derived from both people, animals, plants, professions and places.

### Names from places

Names of places have often served as an inspiration for descriptive nomenclature. Eponymous terms have been used to signify the origin of a surgical procedure or to illustrate the appearance of a particular pathology.

A good example is the '*Indian forehead flap*'<sup>6</sup> which originated in India as a method of nasal reconstruction.<sup>7</sup> This technique is often erroneously attributed to Sushruta; an ancient Indian surgeon who performed nose reconstructions using a flap taken from the cheek but never actually performed a forehead flap nor described it in his surgical treatise, '*Sushruta Samhitha*'.<sup>8</sup> Another descriptive name for nasal reconstruction is the '*Italian method*' described by Gasper Tagliacozzi and involves using a flap from the arm.<sup>9</sup>

Another example is the '*Chinese flap*', also known as the Radial Forearm Free Flap which was described by Yang et al in 1981. This versatile free flap taken from the forearm, based on the radial artery and the venous system is the workhorse flap for head and neck reconstruction and was performed in China for many years prior to its global introduction<sup>10</sup>. It has since gained popularity for its reliable anatomy, long pedicle and ease of elevation.

'*Singapore flap*' is another flap taken its name from a place name. It was described by the Singapore Plastic Surgeon Dr Julian Wee and Paediatric Surgeon Dr V T Joseph in 1992. It is a flap taken from the pudendal area and is used in vaginal reconstruction.<sup>11</sup>

A contour of a geographical landscape can also be used to illustrate the appearance of a lesion or pathology, as demonstrated by café au lait spots. These are macular lesions that occur anywhere on the body, often oval in shape and brownish in colour. Café au lait spots have been described as having either a '*coast of California*' or '*coast of Maine*'

appearance, illustrating the smooth or irregular borders of the lesions, suggestive of fibrous dysplasia<sup>12</sup> or neurofibromatosis<sup>13</sup> respectively.

### Names from professions and hobbies

*Game-keeper's thumb* is a term which describes a chronic injury to ulnar collateral ligament of thumb metacarpophalangeal joint and was coined by Campbell who recognized this injury in Scottish gamekeepers who used their thumb and index fingers to sacrifice rabbits. He noted this lesion in the dominant hand of 20 of the 24 game keepers that he examined.<sup>14</sup> The term *Skier's thumb* was first used by Gerber et al to describe the acute type injuries in the same location.<sup>15</sup>

*Bowler's thumb* is a term used for neuroma of the ulnar side digital nerve of the thumb from holding the ten-pin bowling ball, the edge of the which pressing against the nerve and was first described by Siegel in 1965.<sup>16</sup>

Other examples include *Mariner's ulcer*, implying the importance of sun exposure as an occupational risk factor for basal cell carcinoma (BCC) and *Chimney sweeps cancer*, in reference to scrotal cancer which was commonly seen in chimney sweeps due to the chronic exposure to soot. The latter was first described by Percival Pott in 1775 and remains the first description of a link between an environmental agent and cancer.<sup>17</sup>

### Names from Medical People

An entire book could be dedicated to professionals who have received recognition for their pioneering work in the field of medicine. There are perhaps more procedures in Plastic Surgery which are eponymously named than other surgical specialties.

Surgeons are often not egoistic enough to publish eponymous names of their own and fame is bestowed on them by their colleagues. There are stories of honour and generosity where an author has acknowledged a less known previous work and named it after the

original author. Poland's syndrome is one such example where Alfred Poland described an anomaly of the upper limb associated with a chest wall abnormality in a cadaver that he dissected in 1842.<sup>18</sup> Later in 1962 Patrick Clarkson encountered three patients with such a deformity and reviewing the literature read Poland's description of the anomaly. He published his series of three patients and term the condition Poland's syndrome<sup>19</sup>

Eponyms have been sometime wrongly attributed to people. '*Charle's operation*' is a term used to describe the radical operation for debulking advanced cases of lymphoedema. It is named after Sir Richard Henry Havelock Charles who published a series of 140 consecutive patients treated successfully for scrotal lymphoedema. It was in a book chapter published a decade later, entitled "Elephantiasis Scroti," that Sir Havelock briefly described the treatment of leg lymphoedema but did not document a single successful case report. Since 1950, when Sir Archibald McIndoe attributed the treatment of leg lymphoedema with radical excision and skin grafting to Sir Havelock there have been several references to Charles for the treatment of leg lymphedema.<sup>20</sup>

### .Names from non-medical people

*Terry-Thomas' sign*, named after the distinctive English comic actor Thomas Terry Hoar-Stevens (b. 1911 – d.1990) who had the trademark gap in his front teeth (Fig 1).



Fig 1: Terry Thomas and and X-Ray of scapholunate dissociation

It denotes a radiological feature seen in the ligamentous injury of the scaphoid bone with a gap of greater than 3 mm between the scaphoid and lunate bones and was first coined by VH Frankel in a letter to the journal.<sup>21</sup>

Peter Paul Rubens (June 28, 1577 – May 30, 1640), is a seventeenth-century Flemish Baroque painter, known especially for the 'Three Graces' which beautifully illustrates the subjects' 'love-handles'.(Fig 2)

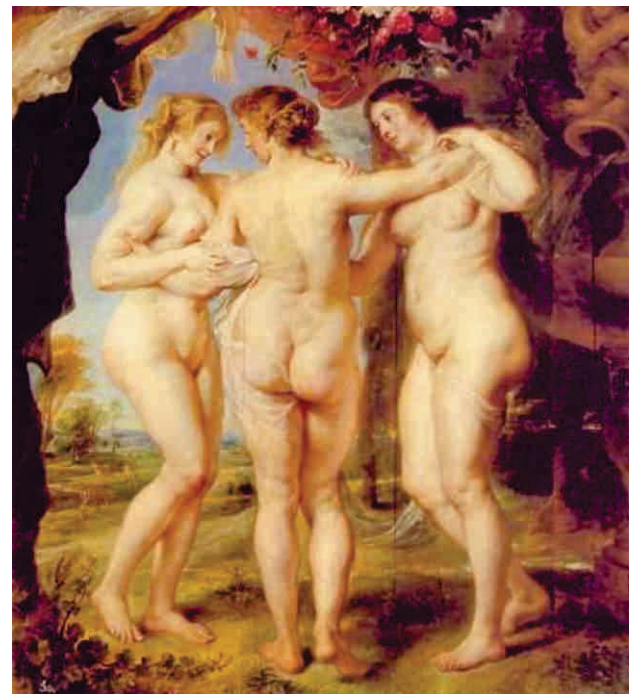


Fig 2: 'The Three Graces' by Peter Paul Rubens. Perhaps the painting depicts the donor sites for SGAP/IGAP flaps even better!

The free flaps taken from this area for breast reconstruction have been named after him and are often referred to as *Rubens' flaps*.<sup>22</sup>

### Names from fictional characters

Andy Gump, a comic strip creation of Sidney Smith in 1917, is the inspiration for the eponym, *Andy-Gump deformity*. Andy had a characteristic micrognathia, very similar to the abnormal appearance associated with a central mandibular deficiency following cancer resections prior to reconstruction.

Dumbo Ears is an obsolete term used to describe prominent ears, after the loving elephant character of the same name in the animated film released in 1941 by Disney. Dumbo has unusually large ears which initially make him an object of ridicule in the circus but he eventually discovers that he can fly by flapping them. This obviously is a misnomer since the prominent ears in humans are not larger in size and merely have a lack of antihelical fold or have deep conchae. Perhaps the only similarity is that some of the children with prominent ears also experience bullying at school on account of their ears.

Proteus Syndrome, featuring asymmetrical hypertrophy of the face, limbs or trunks, with epidermal naevi, haemangiomas and hamartomas is named after Proteus, a sea god in Greek Mythology, who was capable of assuming many forms. Joseph Merrick, the elephant man, made famous through the film of the same title is believed to have suffered from Proteus syndrome. The term was coined by Wiedemann et al in 1983<sup>23</sup>

Snoopy-nose deformity refers to a breast deformity seen as part of Tuberous breast deformity spectrum. The abnormality in these cases is a ptotic breast with a constricted base resembling the nose of the cartoon character Snoopy who appears alongside Charlie Brown in the famous 'Peanuts' series created by Schultz. The term was first introduced by Mc Gibbon in 1976.<sup>24</sup>

### Names from flora

Potato nose is a descriptive term for rhinophyma, which is caused by hypertrophy of the sebaceous glands and surrounding connective tissue of the nasal skin, with dilation of follicles and prominent vascularity of the skin. This results in a significant nodular enlargement and redness of the nose and occurs primarily in men.<sup>25</sup> It should be mentioned that most potatoes such as the King Edward variety do not bear resemblance to rhinophyma. Perhaps the one who coined

the term was more familiar with the red pontiac variety which has the pitted appearance of rhinophyma (Fig 3)



Fig 3: Red Pontiac potato

*Cauliflower ear* is a condition often seen in amateur wrestlers and rugby players. The aetiology is often blunt trauma to the pinna, resulting in a haematoma forming between the perichondrium and cartilage. If not evacuated, ischaemia of the underlying cartilage ensues and results in the obliteration of the convolutions of the external ear.

*Strawberry haemangiomas* are named so for their a red strawberry-like appearance. These are benign tumours of the endothelial cells and appear in infancy progressively enlarging in size before they involute. Their resemblance to the fruit led to the old wife's tale that the affected baby's mother may have had cravings for strawberries while pregnant. The French term *peau d'orange* means "orange skin" and is a term used to describe the skin involvement in carcinoma breast where there is both stromal infiltration and lymphatic obstruction with oedema.<sup>26</sup>

'*Melon slicing*' is a term often heard in the Plastic surgery circles in the UK to refer to a lower abdominal apronectomy without any muscle placcation or umbilical repositioning. However the authors have not been able to find the term in text books or journals and its origin therefore is uncertain.

### Names from Fauna

*Elephant foot* refers to enlargement of lower limbs resulting from infection with lymphatic filariasis, caused by a parasite endemic to many parts of Asia and Africa. The first reliable documentation of elephant foot was by Jan Huyghen van Linschoten, a Dutch Protestant merchant, traveller and historian, whilst exploring the Portuguese colony of Goa (1588 & 1592). During the trip, he noted that the inhabitants were "all born with one of their legs and one foot from the knee downwards as thick as an elephant's leg".<sup>27</sup>

*Stork bite* is a colloquial term for Naevus flammeus neonatorum or Nevus flammeus nuchae, a pink, flat, irregularly-shaped vascular malformation on the back of the neck.

*Hare-lip* is another term that is now no longer used to describe cleft lip. Rabbits have a midline cleft of their lip which bears little resemblance to the common lateral clefts seen in babies. Ralph Millard has described the inappropriateness of the term in his book 'Cleft Craft' and has made a jovial suggestion that considering the genetic aetiology of cleft lip, the term 'Heir-lip' may be a more appropriate terminology.<sup>28</sup>

*Bat ears*, a term still used for prominent ears derive its origin from the appearance of bat wings. The actual ears of the bat however are rather small and inconspicuous.

*Rodent ulcer*, is a term occasionally preferred by some clinicians over the more scientific 'Basal cell cancer', whilst breaking the diagnosis to patients. The popularity of the term is probably helped by the fact that it avoids the word cancer and therefore thought to be less distressing for patients. The burrowing skills of the rodent are comparable to the tumour cells which cause local invasion without metastatic spread. It was first described by Jacob in 1824 and though it was originally described eponymously as Jacob's ulcer, the terminology did not gain popularity.<sup>29</sup>

'*Butterfly children*' is a term used to describe the unfortunate victims of epidermolysis bullosa, a skin condition characterised by poor adherence between epidermis and dermis. These children develop skin blister with even the mildest of shearing forces and their skin needs to be handled as delicate as a butterfly's wings.

A list of the eponyms and descriptive names described in this article is given in table 2.

Table 2: List of some of the Eponyms and Descriptive terms in Plastic Surgery  
(This table is not comprehensive and is only meant to be illustrative of the ones used in the article).

Term	Type of term	Equivalent medical term	First used
<b>Indian flap for rhinoplasty</b>	Descriptive term of geographical origin	Median forehead flap	Findlay and Crusoe, 1794
<b>Italian flap for rhinoplasty</b>	Descriptive term of geographical origin	Medial arm flap	Tagliacozzi, 1597
<b>Chinese flap</b>	Descriptive term of geographical origin	Radial forearm flap	Yang et al, 1981
<b>Singapore flap</b>	Descriptive term of geographical origin	Pudendal artery perforator flap	Wee and Joseph, 1989
<b>Coast of California appearance</b>	Descriptive term of geographical origin	Regular margin café au lait spot	uncertain
<b>Coast of Maine appearance</b>	Descriptive term of geographical origin	Irregular margin café au lait spot	uncertain

<b>Term</b>	<b>Type of term</b>	<b>Equivalent medical term</b>	<b>First used</b>
<b>Game-keeper's thumb</b>	Descriptive term from profession	Chronic ulnar collateral ligament injury thumb	Campbell, 1955
<b>Skier's thumb</b>	Descriptive term from hobby	Acute ulnar collateral ligament injury thumb	Gerber 1981
<b>Bowler's thumb</b>	Descriptive term from hobby	Neuroma of digital nerve of thumb	Siegel, 1965
<b>Mariner's ulcer</b>	Descriptive term from profession	Basal cell carcinoma	uncertain
<b>Chimney sweep's cancer</b>	Descriptive term from profession	Squamous cell carcinoma of scrotum	Percival Pott, 1775
<b>Charle's operation</b>	Eponymous operation	Radical excision of lymphoedematous tissue and split skin grafting	Mc Indoe, 1950
<b>Terry-Thomas' sign</b>	Eponymous sign	Scapho-lunate gap on X-Rays	Victor H Frankel, 1978
<b>Rubens' flap</b>	Eponymous flap	Deep circumflex iliac artery flap	Haartrampf, 1994
<b>Andy Gump deformity</b>	Eponymous deformity	Central mandibular deficiency	Schnitman H, Grosz C, 1964
<b>Dumbo ears</b>	Descriptive term from fictional character	Prominent ears	Uncertain
<b>Proteus syndrome</b>	Descriptive term from fictional character	Complex hamartomatous malformation	Wiedmann, 1983
<b>Snoopy-nose deformity</b>	Descriptive term from fictional character	Grade four, Tuberous breast deformity	McGibbon, 1976
<b>Potato nose</b>	Descriptive term from vegetable	Rhinophyma	Odou EL, Odou BR, 1961
<b>Cauliflower ear</b>	Descriptive term from vegetable	Auricular haematoma	Uncertain
<b>Strawberry angioma</b>	Descriptive term from vegetable	Haemangioma	Uncertain
<b>Peau d'orange</b>	Descriptive term from vegetable	Oedema of skin in carcinoma breast	Leitch A, 1909
<b>Elephant foot</b>	Descriptive term from animal	Filariasis leg	Jan Huyghen van Lin, 1592

<b>Term</b>	<b>Type of term</b>	<b>Equivalent medical term</b>	<b>First used</b>
<b>Stork bite</b>	Descriptive term from bird	Naevus flaemmus neonatorum	Uncertain
<b>Hare lip</b>	Descriptive term from animal	Cleft lip	Galen, 2 <sup>nd</sup> Century AD
<b>Bat ear</b>	Descriptive term from animal	Prominent ears	Uncertain
<b>Rodent ulcer</b>	Descriptive term from animal	Basal cell carcinoma	Jacob A, 1824
<b>Butterfly children</b>	Descriptive term from insect	Epidermolysis bullosa	Uncertain

Whilst the origins of many of the names can be traced to their creators, some others remain enigmatic. The year of the eponym is taken as the year when it has first appeared in medical literature and it is possible that many of the terms may have been in medical parlance much before.

#### **Are eponyms and descriptive terms useful?**

This list is not comprehensive and is merely an attempt at organising the eponyms and other descriptive names in Plastic surgery into categories. They make reading interesting and also honour those who made important contributions to the specialty. However all the terms are not appropriate descriptions and some may need a stretch of reader's imagination to appreciate the resemblance.

The debate about the usefulness of eponyms seems to be dominated by campaigners against them. The supporters of medical eponyms argue that they bring colour to medicine and that they embed medical traditions and culture. They feel that eponyms are medical shorthand and make communication easy.<sup>4</sup> The argument against eponyms seems to be that they lack scientific accuracy and lead to confusion. They feel that eponyms do not always reflect scientific achievement but influences of politics,

language, culture or luck. They also feel that some of the eponyms are inappropriate since they are connected to Nazi experiments.<sup>5</sup>

However the authors believe that eponyms do make reading interesting and facts memorable. There are several eponyms which have stood the test of time and therefore will continue to find their place in textbooks. Several others may pass into oblivion mostly because they are probably inaccurate descriptions or unwieldy terminologies which do not help the reader very much.

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