

SHORT COMMUNICATION



Shape of ulcer and its analogies

T. M. Rashmi¹, H. S. Sathish², M. S. Thirunavukkarasu³, B. Mithun⁴, M. G. Narmada⁵

¹Department of Kayachikitsa, Indian Institute of Ayurvedic Research and Hospital, Rajkot, Gujarat, India, ²Department Shalya Tantra, Indian Institute of Ayurvedic Research and Hospital, Rajkot, Gujarat, India, ³Department of Kayachikitsa, Government Ayurvedic Medical College, Nagercoil, Tamil Nadu, India, ⁴Department of Shalakyta Tantra, ALN Rao Memorial Ayurvedic Medical College, Koppa, Karnataka, India, ⁵Department of Shalya Tantra, Government of Ayurvedic Medical College, Bengaluru, Karnataka, India

Keywords:

Analogy, shape, ulcer

Correspondence:

Dr. H. S. Sathish, Department of Shalya Tantra, Indian Institute of Ayurvedic Research and Hospital, Rajkot, Gujarat - 360 110, India. Mob.: +91-9624653733. E-mail: ayursathishhs@gmail.com

Received: 15 March 2019;

Accepted: 20 April 2019

Doi: 10.15713/ins.jmrps.162

Abstract

Ancient Indian Ayurvedic surgical text has elaborated a detailed, systematic description on utilizing analogies to teach medicos both in medical and surgical teaching. Subsequent to this period other schools of medicine and surgery adopted the analogies to educate the medicos. Now, medical teaching curriculum has ignored the significance of analogies. In the present study, 83 shapes of ulcer with its analogies cited in contemporary system of medicine have been discussed. Analogies help as mnemonic tool and also a key factor in diagnosis of an ulcer.

Introduction

Medicos are devoting less significance to the topic of shapes of ulcer among other ulcer attributes such as edge and base. Till date, a comprehensive list of shapes is unfound neither in exclusive texts of wound nor in texts of surgery. The shape of ulcer plays a noteworthy role in prognosis of the wound.^[1] The primary written documentation on shape of ulcer is from *Sushruta Samhita* authored by legendary surgeon *Sushruta*. In this treatise, various normal and abnormal shapes of ulcer have been discussed. The normal shapes of ulcer which heals spontaneously or with minimal therapeutic intervention are *Aayata* (Diffuse), *Chaturasra* (Rectangular), *Vritta* (Circular), and *Tripata* (Triangular), the shapes which are distinct from these shapes are said to get healed with difficulty or incurable.^[2] Relation of prognosis of wound with its shape has been detailed in his treatise. These shapes are designated with specific analogies for enhanced perception on the subject, as analogical teaching is one of the ancient Indian forms of education.^[3] Numerous analogies are mentioned for specific type of ulcer and comprehensive list of the same is unavailable. This study is aimed to screen, collect, and review such analogies related to shape of ulcers.

Aim and objective

This study aims to compile and analyze the shapes of ulcers.

Method

The search was performed in March 2019 using Google Scholar. Key word searched was “Shaped ulcer.” All studies containing a specific shape of the ulcer are screened from the search findings. Multiple articles with same shape are excluded.

Observation and Discussion

Analogies aid easy perception of the topic and serve as mnemonic tool to memorize the subject. The basic fundamental mode of human communication is metaphorical communication and juxtaposition of imagery.^[4] By utilizing analogies, complex concepts are simplified and provide enhanced understanding of the subject.^[5] A number of analogies related to shapes of the ulcer have been screened from the Google Scholar and data collected are screened and tabulated in Table 1. This table illustrates the analogies with its broader classification found from the searches to demonstrate the shape of the ulcers. The collected analogies fall under various categories such as geometrical, alphabetical, celestial objects, zoological, anatomical, numerical, crockery, culinary, and veterinary. Among alphabetical C, D, L, T, U, V, and X shaped ulcers were found, while anatomical type of analogies comprised scaphoid, heart, diverticular, meniscoid, kidney, fascicular, lens, and tongue shaped. Certain botanical

Table 1: The shape of ulcer and its analogies

Shape of ulcer	Analogy description	Type of analogy
Almond-shaped ulcer	Fruit of <i>Prunus dulcis</i>	Botanical
Annular-shaped ulcer	Circular or ring shaped	Geometrical
Bizarrely shaped ulcer	No specific shape can be attributed	
Boat-shaped ulcer	A small vessel for traveling over water	Transportation
Bottle-shaped ulcer	A container which stores or transports liquids	Crockery
Bowl-shaped ulcer	Spherical dish	Crockery
Butterfly-shaped ulcer	An insect in macrolepidopteran clade	Zoological
Button-shaped ulcer	Button of a shirt	Ornamental
C-shaped ulcer	English alphabet "C"	Alphabetical
Canoe-shaped ulcer	A lightweight narrow vessel	Transportation
Chevron-shaped ulcer	A V-shaped or upside V-shaped stripe on the sleeve of police or military uniform	Heraldry
Circumferential-shaped ulcer	Circular or near circumference or near the border	Geometrical
Clover-shaped ulcer	Plant of the genus <i>Trifolium</i>	Botanical
Collar button-shaped ulcer	Shape of collar button of a shirt	Ornamental
Comma-shaped ulcer	Punctuation mark	Punctuation
Cone-shaped ulcer	A three-dimensional geometric shape	Geometrical
Crater-shaped ulcer	Circular depression on the surface of planet or any solid body in solar system	Celestial object
Crescent-shaped ulcer	It is a symbol used to represent the first quarter of lunar phase	Celestial object
Cup-shaped ulcer	Commonly used container for pouring and drinking liquids	Crockery
D-shaped ulcer	English alphabet "D"	Alphabetical
Diamond-shaped ulcer	A solid form of carbon commonly shaped like marquise	Ornamental
Dish-shaped ulcer	A type of crockery	Crockery
Disk-shaped ulcer	A flat circular-shaped object	Geometrical
Diverticular shaped ulcer	Abnormal sac or pouch from a tubular structure	Anatomical
Dome-shaped ulcer	A rounded vault	Architectural
Drop-shaped ulcer	Small column of liquid	Apothecary measurement
Egg-shaped ulcer	Dietary item	Culinary
Eight-shaped ulcer	Number 8 shaped	Numerical
Ellipse/elliptical-shaped ulcer	A mathematical shape	Mathematical
Fascicular shaped ulcer	A bundle of skeletal muscle cells bounded by a fascia	Anatomical
Fern-shaped ulcer	A flowerless plant	Botanical
Flask-shaped ulcer	It is a web framework	Computer related
Flower shaped ulcer	A reproductive structure of a plant	Botanical
Funnel-shaped ulcer	A tubular object which is wide at top and narrow at the bottom	Crockery
Geographic-shaped ulcer	A field of land	Geographical
Gutter-shaped ulcer	A narrow trough for carrying rainwater	Architectural
Heart-shaped ulcer	An organ of the body	Anatomical
Horse-shaped ulcer	Similar to horse	Veterinary
Horseshoe-shaped ulcer	Object fitted to horse's hoof	Veterinary
Keyhole shaped	An aperture in the lock	Mechanical
Kidney-shaped ulcer	Shape of kidney	Anatomical

(Contd...)

Table 1: (Continued)

Shape of ulcer	Analogy description	Type of analogy
L-shaped ulcer	English alphabet "L"	Alphabetical
Lens-shaped ulcer	A part in the eye	Anatomical
Lenticular shaped wounds	Its related to lens	Botanical
Linear-shaped ulcer	Shape of straight line	Geometrical
Longitudinal-shaped ulcer	A linear running shape	Geometrical
Lozenge-shaped ulcer	Object with rhombus or diamond shape	Semiotic
Map-shaped ulcer	Symbolic depiction of relationship between space objects and regions	Script
Meniscoid-shaped ulcer	It resembles meniscus	Anatomical
Mushroom-shaped ulcer	Fungal growth on soil or on its food source	Zoological
Nest-shaped ulcer	Structure built by birds	Architectural
Oval-shaped ulcer	Oval shape	Geometrical
Ovoid-shaped ulcer	Oval shaped	Geometrical
Pear-shaped ulcer	A tree or shrub	Botanical
Plaque-shaped ulcer		Biofilm
Polygonal-shaped ulcer	A closed plane figure with more sides	Geometrical
Punched-out shaped ulcer	Rounded, well-circumscribed shape	Miscellaneous
Rectangular shaped ulcer	Rectangular shape	Geometrical
Ring-shaped ulcers	An ornament	Ornamental
Rocket-shaped ulcer	A spacecraft	Space related
Rod-shaped ulcer	An elongated instrument	Instrument
Round-shaped ulcer	Round shape	Geometrical
Saddle-shaped ulcer	It refers to a supportive structure for a rider	Fashion accessory
Saucer-shaped ulcer	A shallow dish	Crockery
Scaphoid-shaped ulcer	One of carpal bone	Anatomical
Shield-shaped ulcer	Piece of personal armor	Weapon
Sickle-shaped ulcer	A handheld agriculture tool	Agriculture tool
Snail track-shaped ulcer	Slime trail or a kind of mucus produced by snails	Zoological
Spherical-shaped ulcer	Geometrical shape	Geometrical
Spindle-shaped ulcer	A slender rounded rod	Geometrical
Spoon-shaped ulcer	Type of cutlery used to serve or mix or to eat	Utensil
Star-shaped ulcer	Shape of star	Celestial
Stellate-shaped ulcer	Star shaped	Celestial
Tadpole-shaped ulcer	Larval stage of an amphibian	Zoological
Tongue-shaped ulcer	A muscular organ of the mouth	Anatomical
Transversely shaped ulcer	Horizontally placed	Anatomical
Triangular	Triangle	Geometrical
U-shaped ulcer	English alphabet "U"	Alphabetical
U-shaped ulcer	English alphabet "U"	Alphabetical
V-shaped ulcer	English alphabet "V"	Alphabetical
Volcano-shaped ulcer	Crack in the earth which erupts volcanic ash, fire, and gases	Planetary object
Wedge-shaped ulcer	Triangular shaped tool	Tool

(Contd...)

Table 1: (Continued)

Shape of ulcer	Analogy description	Type of analogy
Wheat sized and shaped ulcer	A specific type of cereal grain	Culinary
Worm eaten shaped ulcer	No specific shape can be attributed, yet it can be considered a ulcer with irregular base and edge with deep burrows	Miscellaneous
X-shaped ulcer	English alphabet "X"	Alphabetical
Y-shaped ulcer	English alphabet "Y"	Alphabetical

Table 2: Shapes of ulcer (with its analogies) in different diseases and sites

Shape	Site	Disease
Almond-shaped ulcer-n=2	Skin ^[6]	Epithelioma
Annular-shaped ulcer-n=2	Ileum	Adamantiades-Behcet's disease
Boat-shaped ulcer-n=4	Anterior third of left vocal cord, anal canal	Subacute laryngitis, fissure in ano
Bottle-shaped ulcer-n=1	Intestinal mucosa	Intestinal amebiasis in spider monkey
Bowl-shaped ulcer-n=6	Stomach	Carcinoma of the stomach
Butterfly-shaped ulcer-n=10	Rectum, gluteal region, face, gastric mucosa (lesser curvature)	Solitary rectal ulcer syndrome, pressure ulcer, basosquamous cell carcinoma, gastric carcinoma
Button-shaped ulcer-n=7	Colon, corona of the penis	Ulcerative colitis, early syphilis
C-shaped ulcer-n=3	Cornea, lateral aspect of leg	Acanthamoeba keratitis, lupus serpiginosus with elephantiasis
Canoe-shaped ulcer-n=5	Anal verge ^[7]	Anal fissure
Circumferential-shaped ulcer-n=1	Terminal ileum ^[8]	Intestinal tuberculosis
Clover-shaped ulcer-n=1	Leg	Primary deep venous reflux
Collar-button shaped ulcer-n=2	Colon, rectum	Inflammatory disease of gastrointestinal tract, ischemic proctosigmoiditis, anorectal herpes
Comma-shaped ulcer-n=1	Pyloric region	malignant gastric ulcer
Cone-shaped ulcer-n=5	Stomach, gluteal region	Leiomyoma of gastrointestinal tract, pressure ulcer
Crater-shaped ulcer-n=31	Nipple area, plantar surface of great toe, buccal mucosa, face, posterior aspect of right maxillary tuberosity, cornea, incisura angularis, hard palate	Paget's disease, familial syringomyelia, keratoacanthoma, Sigmund Freud's oral cancer, corneal ulcer, ocular pemphigus, gastric ulcer, pleomorphic sarcoma of the cheek, osteogenic sarcoma of maxilla, necrotizing sialometaplasia of the hard palate
Crescent-shaped ulcer-n=47	Nose, lateral ala nasi, gastric mucosa, cheek, cornea, medial wall of the duodenal bulb, frontal scalp, temporal region	Trigeminal trophic disease, benign gastric ulcer, Mooren's ulcer, cutaneous vasculitis, ocular inflammation
Cup-shaped ulcer-n=21	Skin, under the chin, scalp, pyloric end of stomach	Reactive perforating collagenosis, acquired perforating dermatosis, epithelioma, sporotrichosis, clear cell acanthoma, skin cancer
Diamond-shaped ulcer-n=15	Transverse colon, anterior vaginal wall, over Achilles tendon, mid-esophagus, ascending colon	Colitis, post-coital vault dehiscence, larval infestation of chronic ischemic leg ulcer, HIV esophagitis, amebiasis
Dish-shaped ulcer-n=2	Skin	Regional dermatoses
Disk-shaped ulcer-n=3	Cornea, conjunctiva	Acanthamoeba keratitis, primary chancre
Diverticular shaped ulcer-n=1	Aorto-esophageal fistula site	Aorto-esophageal fistula
Dome-shaped ulcer-n=1	Skin	Mycosis fungoides
Drop-shaped ulcer-n=2	Anal verge	Anal fissure
Egg-shaped ulcer-n=1	Small intestine	Edematous lesions of small bowel
Eight-shaped ulcer-n=1	Vertex of the scalp	Aplasia cutis congenital
Ellipse (n=1)-elliptical (n=3) shaped ulcer	Colon, tongue, anal verge	Acetic acid-induced colitis in rats, eosinophilic ulcer of the tongue, anal fissure

(Contd...)

Table 2: (Continued)

Shape	Site	Disease
Fascicular shaped ulcer–n=1	Conjunctiva and cornea	Keratoconjunctivitis
Fern-shaped ulcer–n=1	Cornea	Corneal ulceration
Flask-shaped ulcer–n=143	Intestinal mucosa	Amebiasis, intractable ulcerating enterocolitis, shigellosis
Flower shaped ulcer–n=1	Lesser curvature of stomach	Stomach carcinoma
Funnel-shaped ulcer–n=38	Ascending colon, greater curvature of stomach, clavicle, left ventricle of heart, hard palate, epiglottis, anterior commissure of larynx, gums, cornea	Perforating non-specific ulcer of ascending colon, gastric ulcer, neurofibromatosis, acute rheumatism, tubercular ulceration of the petiolus region of epiglottis, pathological lesion due to measles, oral precancerous lesion, phlyctenular disease of the eye
Geographic-shaped ulcer–n=8	Lower back, ileocecal valve, transverse colon	Concurrent cytomegalovirus and herpes simplex virus infection, intestinal tuberculosis, intestinal Behcet's disease, CMV colitis
Gutter-shaped ulcer–n=1	Skin ^[9]	Pyoderma
Heart-shaped ulcer–n=3	Stomach, cornea	Keratomycoses, A fatal case of dysentery
Horse-shaped ulcer–n=2	Intestinal mucosa	Non-specific intestinal obstruction, non-specific intestinal ulcer
Horseshoe-shaped ulcer–n=12	Posterior aspect of chest, ^[10] groin and perineum, skin, cornea, nail bed	Granulomatous pyoderma, late nodular syphilide, Mooren's ulcer, syphilitic paronychia
Keyhole-shaped ulcer–n=1	Hard palate	Oral ulcer
Kidney-shaped ulcer–n=9	Forearm, thigh, scrotum, cornea	Pyoderma gangrenosum, congenital syphilis, scrotal carcinoma, keratitis
L-shaped ulcer–n=2	Medial aspect of leg	Neoplastic disease occurring in varicose ulcers
Lens-shaped ulcer–n=1	Colon	Intraluminal meniscoid ulcer in the colon
Lenticular shaped ulcer–n=1	Esophagus	Ulcerative carcinoma of the esophagus
Linear-shaped ulcer–n=7	Colon, gastric mucosa, duodenum	Infectious colitis, gastric ulcer, duodenal ulcer
Longitudinal-shaped ulcer–n=3	Small intestine ^[11]	Cytomegalovirus colitis, intestinal tuberculosis
Lozenge-shaped ulcer–n=1	Esophagus ^[12]	Epithelioma of esophagus
Map-shaped ulcer–n= 7	Colon, cornea, rectum	Crohn's disease, ocular manifestation due to Brucella infection, acute hemorrhagic rectal ulcer
Meniscoid-shaped ulcer–n=1	Esophagus ^[13]	Barrett carcinoma of the esophagus
Mushroom-shaped ulcer–n=5	Neck, greater curvature of the stomach	Plaque ulceration in the stenosed carotid bifurcation, gastric ulcer
Narrow-shaped ulcer–n=2	Large intestine ^[14]	Collagenous colitis
Nest-shaped ulcer–n=1	Lesser curvature of the stomach ^[15]	Gastrojejunal ulcer
Oval-shaped ulcer–n=95	Esophagus, terminal ileum, ileocecum, duodenal apex, gastric mucosa, pretibial area, small intestinal mucosa, incisura stomach, large colon, flank, skin of hands and feet, base of the tongue, dorsum of the right foot, frontoparietal region of scalp, vertex area, lower limb, upper labial mucosa, left dorsal forearm, cornea, glans penis, left side of nose, hard palate, cervix, oral mucosa, above the popliteal space, anal verge, terminal rectum	Esophageal moniliasis, Behcet's ulcer, Bouveret's syndrome, gastric lesions, <i>Serratia marcescens</i> , European Cooperative Crohn's Disease, pyloric adenomyoma, phlebosclerotic colitis, American cutaneous leishmaniasis, benign tumors of small intestine, actinomycotic lesions, Addison's disease, Parkes Weber syndrome, acute irritant dermatitis, adult progeria, pyoderma gangrenosum, isotretinoin-induced acne fulminans, giant basal cell carcinoma of scalp, Moraxella atlantae keratitis, primary tuberculosis of penis, Parry-Romberg syndrome, mucormycosis, chancroid ulcer of the os uteri, inflammatory bowel diseases, osteonecrosis of the jaw, mycosis fungoides, anal fissure, acute hemorrhagic rectal ulcer
Ovoid-shaped ulcer–n=4	Terminal ileum, colon, duodenum	Behcet's disease, colonic obstruction by phytobezoar
Pear-shaped ulcer–n= 7	Great trochanter, anal verge	Multiple sclerosis, Anal fissure

(Contd...)

Table 2: (Continued)

Shape	Site	Disease
Plaque-shaped ulcer–n=1	Eyeball	Dry eye syndrome
Polygonal-shaped ulcer–n=2	Oral mucosa	Duloxetine hydrochloride-induced oral lichenoid reaction
Punched-out shaped ulcer–n=3	Bauhin's valve ^[16]	Behcet's disease
Rectangular shaped ulcer–n=9	Jejunum, gastric mucosa, posterior neck	Cytomegalovirus infection of the alimentary tract, malignant gastric ulceration, basal cell carcinoma
Ring-shaped ulcers–n=21	Cornea, intestinal mucosa, esophagus	Keratomycosis, keratitis, Crohn's disease, peptic ulcer of esophagus, sporadic keratomalacia
Rocket-shaped ulcer–n=2	Anal verge (distal anal canal)	Anal fissure
Rod-shaped ulcer–n=2	Antrum of stomach ^[17]	Peptic ulcer
Round-shaped ulcer–n=48	Cecum, ^[18] cornea, small intestine, oral mucosa, scrotum, interphalangeal joint, right lower leg, prepyloric area	Intestinal Behcet's disease, corneal ulcer, Crohn's disease, diabetic wound, gastric ulcer
Saddle-shaped ulcer–n=41	Lesser curvature of the stomach, duodenojejunal flexure	Perforating carcinoma of stomach, gastric ulcer, carcinoma of duodenum
Saucer-shaped ulcer–n=10	Pyloric opening, leg	Fecal fistula following herniotomy for strangulated hernia, carcinoma of pylorus, bacterial infected leg ulcer
Shield-shaped ulcer–n=5	Cornea	Vernal conjunctivitis, recalcitrant atopic keratoconjunctivitis
Sickle-shaped ulcer–n=4	Cornea	Keratoconjunctivitis
Snail track shaped ulcer–n=2	Buccal mucosa	Pyostomatitis
Spherical-shaped ulcer–n=2	Soft palate	Pleomorphic adenoma of palate
Spindle-shaped ulcer–n=5	Anal verge	Anal fissure
Spoon-shaped ulcer–n=1	Sternum	Gummous syphilis of the thyroid gland
Star-shaped ulcer–n= 5	Anterior rectal wall, ^[19] terminal ileum, heel, nose	Solitary rectal ulcer, inflammatory diseases of the colon, metatarsalgia, bacterial infection of mandrillaris
Stellate-shaped ulcer–n=5	Right medial thigh, duodenum	Active calciphylaxis ulcer, duodenal tuberculosis
Tadpole-shaped ulcer–n=4	Gastric mucosa	Gastric ulcer
Tongue-shaped ulcer–n=1	Cornea	Mooren's ulcer
Transversely shaped ulcer–n=1	Leg	Chronic leg ulcer
Triangular–n=26	Anterior wall of lower rectum, medial aspect of left upper eyelid, back of right hand, behind the pylorus, gluteal region, tip of tongue, duodenum, terminal ileum, lesser curvature of stomach, greater curvature of stomach	Artifact ulcers, ^[20] herpes zoster complicated by myiasis, solitary rectal ulcer syndrome, gluteal fat necrosis, tuberculosis of oral cavity, duodenal ulcer, idiopathic inflammatory bowel disease,
U-shaped ulcer–n=4	Cornea, gingiva, small intestine, gastric mucosa	Keratomycosis, aphthous stomatitis, Crohn's disease, early gastric cancer
V-shaped ulcer–n=25	Perineum, neck, colon, colon, right lateral calf, gastric mucosa	Histiocytosis, ulcerated carotid atherosclerotic plaque, inflammatory bowel disease, Crohn's disease, post-inflammatory hyperpigmentation, early gastric cancer
Volcano-shaped ulcer–n=2	Intestinal mucosa ^[21]	Intestinal Behcet's disease
Wedge-shaped ulcer–n=8	Thigh, ^[22] bladder mucosa, foot, upper lip, cornea	Pyoderma gangrenosum, interstitial cystitis, livedo reticularis, corneal ulcer
Wheat-shaped ulcer–n=4	Cornea ^[23]	Corneal Ulcer
Worm eaten shaped ulcer–n=1	Dorsum of the hand ^[24]	Anaplastic large cell lymphoma
X-shaped ulcer–n=1	Small intestine ^[25]	Non-specific ulceration of the small bowel
Y-shaped ulcer–n=1	Cornea ^[26]	Corneal herpes simplex infection

analogies were also found such as shape of pear, almond, flower, and clover. Stellate and star shapes were grouped under celestial type of analogies. Shapes of ulcer are also analogous with routinely used utensil/crockery such as saucer, cup, spoon, bowl, and dish. A good number of geometrical-shaped ulcers such as triangular, round, oval, rectangular, cone, spherical, and polygonal shapes were recorded. Several studies reported diamond and ring-shaped ulcers which belong to ornamental type of analogies. Butterfly, tadpole, mushroom, and snail-like ulcers fit in zoological variety of analogies. Analogies aid in better perception, retaining and reproducing of acquired knowledge.

Table 2 illustrates the type of analogical shaped ulcers found in different diseases and their respective sites. The shapes of ulcers denote varied information such as type of ulcer, its site, and prognosis. Assessment and diagnosis of an ulcer is the top precedence before initiation of any treatment modality. During the clinical examination of an ulcer, shape of the ulcer suggests about its underlying pathology based on this information, further necessary investigations are planned for confirming the provisional diagnosis. There were studies which fail to designate the shape with any suitable analogy as the appearance of the ulcer itself was so asymmetrical and they were christened as “Bizarrely shaped ulcers.”

Conclusion

The first step in clinical assessment of an ulcer is the direct observation of the attributes of ulcer and to ease the process, several analogies have been described in numerous texts of surgery. Off late, these analogies have lost their valor and confined as textual information. The practical utility of these analogies has been abandoned. This article revives the list of analogies cited for the shape of ulcer and accordingly assists the medicos for diagnosis.

References

- Jung YS, Yoon JY, Lee JH, Jeon SM, Hong SP, Kim TI, *et al.* Prognostic factors and long-term clinical outcomes for surgical patients with intestinal Behçet's disease. *Inflamm Bowel Dis* 2011;17:1594-602.
- Bhishagratna KL, editor. *An English Translation of the Sushruta Samhita Based on Original Sanskrit Text*. Vol. 1. Calcutta: Sanyal, Bhaduri; 1916. p. 201.
- Mahesh RT, Siddalingaiah SH, Shetty MB, Gururajarao NM, Panigrahy LS. Wound exudates and its analogies-a prognostic indicator. *J Res Tradit Med* 2017;3:101-8.
- Nichter M. Education by appropriate analogy. In: *Anthropology and International Health* Dordrecht: Springer; 1989. p. 287-306.
- Bhuvanewari C, Malik M, Sreevani M, Shivudu KV. Significance of using upamana Pramana in ayurveda. *Int J Ayurveda Pharm Res* 2016;4:6.
- Hartzell MB. Morphea-like epithelioma. *J Am Med Assoc* 1909;53:262-4.
- Ansari MS, Nizam R, Ahmad W. Local application of safoof-e-aelwa in fissure in ano: A case series. *Int J Med Res* 2017;2:31-3.
- Park JJ, Cheon JH. Differential diagnosis: Intestinal tuberculosis. In: *Atlas of Inflammatory Bowel Diseases*. Berlin, Heidelberg: Springer; 2015. p. 71-85.
- Semon H, Barber H. Pyoderma of parasitic origin. *Br J Dermatol* 1917;29:173-89.
- Ormaechea-Perez N, Lopez-Pestana A, Lobo-Moran C, Tuneu-Valls A. Superficial granulomatous pyoderma. Report of 2 cases treated with topical tacrolimus. *Actas Dermosifiliogr* 2013;104:721-4.
- Huh CW, Youn YH, Jung DH, Kim DW, Kho BG, Kim JH, *et al.* A case of cytomegalovirus colitis with endoscopic finding resembling crohn's disease. *Korean J Gastroenterol* 2012;59:303-7.
- Medical societies. *Can Med Assoc J* 1913;3:252-60.
- Agha FP. Barrett carcinoma of the esophagus: Clinical and radiographic analysis of 34 cases. *Am J Roentgenol* 1985;145:41-6.
- Miura M, Saito D, Hayashida M, Hismatsu T, Takahashi SI. Characterization of endoscopic findings of small bowel tumors and clinical usefulness of double-balloon endoscopy: 1546. *Am J Gastroenterol* 2015;110:S666. Available from: https://www.journals.lww.com/ajg/Fulltext/2015/10001/Characterization_of_Endoscopic_Findings_of_Small.1546.aspx.
- Strauss AA, Bloch L, Friedman JG. Gastrojejunal ulcer: Medical and surgical considerations. *J Am Med Assoc* 1928;90:181-6.
- Tatsuyuki K, Shin-ichiro F, Masao N, Hideyuki A, Masayuki O, Tatsuyuki S, *et al.* Intestinal Behçet's disease one case of Japan. *Gastrointest Endosc Soc J* 1992;34:2095-101.
- Poplack W, Paul RE Jr., Goldsmith M, Matsue H, Bloom S, Moore JP, *et al.* Linear and rod-shaped peptic ulcers. *Radiology* 1977;122:317-9.
- Kobayashi K, Ueno F, Bito S, Iwao Y, Fukushima T, Hiwatashi N, *et al.* Development of consensus statements for the diagnosis and management of intestinal Behçet's disease using a modified Delphi approach. *J Gastroenterol* 2007;42:737-45.
- Eckardt VF, Kanzler G, Remmele W. Anorectal ergotism: Another cause of solitary rectal ulcers. *Gastroenterology* 1986;91:1123-7.
- Kitchin ID, McGibbon C, Seville RH. Artifact ulcers and bone lesions produced by elastic bands. *Br Med J* 1967;2:218.
- Park JJ, Kim WH, Cheon JH. Outcome predictors for intestinal Behçet's disease. *Yonsei Med J* 2013;54:1084-90.
- Michaëlsson G, Molin L, Öhman S, Gip L, Lindström B, Skogh M, *et al.* Clofazimine. A new agent for the treatment of pyoderma gangrenosum. *Arch Dermatol* 1976;112:344-9.
- Lugossy G. The problem of chemotherapy in trachoma. *Ophthalmologica* 1940;100:277-85.
- Amoh Y, Tanabe K, Takasu H, Katsuoaka K. Primary cutaneous anaplastic large cell lymphoma arising from a burn scar. *Eur J Dermatol* 2012;22:420-1.
- Khan W, Kennedy R. Nonspecific ulceration of the small bowel in children. *J Pediatr Surg* 1972;7:70.
- Kaufman HE. The diagnosis of corneal herpes simplex infection by fluorescent antibody staining. *Arch Ophthalmol* 1960;64:382-4.

How to cite this article: Rashmi TM, Sathish HS, Thirunavukkarasu MS, Mithun B, Narmada MG. Shape of ulcer and its analogies. *J Med Radiol Pathol Surg* 2019;6:15-21.