

Are eponyms easy to remember?

Salkin Cinki Ayse Irem¹, Aksungur Varol Lutfu²

¹Edirne Sultan 1. Murat State Hospital, Department of Dermatology, Edirne Merkez/Edirne, Turkey, ²Cukurova University, Department of Dermatology, Adana, Turkey

Corresponding author: Salkin Cinki Ayse Irem, MD, E-mail: driremsalkin@gmail.com

ABSTRACT

Background: There is a current interest in eponymous dermatological signs. This report aims to investigate their memorability. **Material and Methods:** Twenty-five residents in dermatology were trained with a slide show on 51 eponymous signs. Because of familiarity and ease of answering, seven of them were excluded. For the remaining 44 signs, both eponym-focused and description-focused questions were prepared. Two weeks after the presentation, the residents had an exam composed of randomly selected 12 eponym-focused and 12 description-focused questions. **Results:** The median number of correct answers was 3 (interquartile range: 2–4) for the eponym-focused questions, whereas this figure was 9 (interquartile range: 7–10) for the description-focused questions. The difference was statistically significant ($p < 0.001$). Success rates were higher in the description-focused questions for all signs except two. **Conclusion:** These results suggest that eponyms are less memorable than descriptions. Since there is an ongoing controversy on the elimination of eponyms from the medical literature, more studies should be done on the cognitive aspects of eponymy.

Key words: Eponyms, Dermatology, Cognition

INTRODUCTION

For most scientific findings, it is not widely known who first described them. In other words, they are anonymous. For the rest of scientific findings, it is known who first reported them. However, only a small part of them is named after their discoverers. In other words, they are eponymous.

Recently, numerous reviews on dermatological signs have been published [1-12]. They give quite long lists of signs. Eponymous signs have an important place within these lists. Despite this interest, in the case where discoverers of signs are known, there is a lack of standardization in labeling them with descriptive names or with eponyms. Whatever the reasons for this deficiency, it is worth examining the place of eponyms in learning dermatological signs.

For this purpose, residents in dermatology were trained about dermatological eponymous signs, their descriptions, and their causes. Then, they had an exam

composed of different types of questions. Thereafter, it was evaluated whether eponyms or descriptions were more memorable.

MATERIALS AND METHODS

Dermatological eponymous signs were compiled from recently published articles [1-14]. Widely known signs, such as the Auspitz, Darier, and Nikolsky signs, were excluded. Also, signs that were seen in dermatological diseases but were related to organs other than the skin, such as Hutchinson's teeth sign, were not included. As a result, 51 eponymous signs were used in the present study. They were the Barnett, Battle, Berliner, Besnier, Biederman, Borsieri, Brenner, Buschke-Ollendorff, Casal, Crowe, Cullen, Filipovitch, Fox, Frank, Giovannini, Greenhow, Grey Turner, Guérin, Hildreth, Hoagland, Ingram, Jacquet, Joffroy, Kaposi-Stemmer, Kerr, Krisovski, Liddle, Love, Maroni, Meffert, Milian, Mizutani, Nagayama, Nazzaro, Orentreich, Patrick Yesudian, Pemberton, Pittaluga, Premalatha, Punshi,

How to cite this article: Irem SCA, Lutfu AV. Are eponyms easy to remember?. Our Dermatol Online. 2026;17(2):201-205.

Submission: 21.12.2025; **Acceptance:** 06.02.2026

DOI: 10.7241/ourd.20262.10

Russell, Samitz, Shelly, Shuster, Silex, Sister Mary Joseph, Tasleem, Trousseau, Vieira, Walzel, and Zirelí signs.

A slide show was prepared to train residents in dermatology. In this show, each eponymous sign had two slides. In the first slide, only the eponym was written, and it was voiced in its original language. In the second slide, there were a representative image of the sign, its description, its causes, and the full name of the author. Whenever available, the author's country, specialty, and dates of birth and death were added.

Twenty-five residents receiving specialized training in our department for periods ranging between one month and four years participated in the study. Before the slide show, they were asked to mark the signs known to them from the sign list. Then, the slide show was presented. After the presentation, the residents confirmed their marks. The presentation was given to the residents as a video file. They were asked to watch it for the next two weeks, in order to learn thoroughly the content of the video.

Multiple-choice questions were prepared for each eponymous sign. However, five of them, namely the Cullen, Grey Turner, Pemberton, Sister Mary Joseph, and Trousseau signs, were excluded, since they were familiar before the slide show to a majority of the residents. The questions were of four types. In the first type, the question stem was focused on the eponym, as in the following example, "which disease causes the Brenner sign?" Its choices were diseases. In the second type, the stem was focused on the disease, as in the following example, "which sign is caused by melanoma?" Its choices were eponyms. In the third type, the stem was focused on the description of the finding, as in the following example, "which disease causes an ill-defined erythema adjacent to a hyperpigmented lesion?" Its choices were diseases. In the fourth type, the stem was the same as that of the second type. However, its choices were descriptions of the findings.

For the Kerr and Punshi signs, descriptions could easily recall their causes. Therefore, they were also excluded. Thus, 176 questions related to the 44 eponymous signs remained. It was planned to use 6 questions for each type, giving a total of 24 questions. It was aimed that each of these 24 questions was related to a different sign. In order to use questions related to all 44 signs, it was preferred to use, for each resident, a different set of questions, which were randomly selected from the 176 questions. In order to lower the effects of anxiety

about scoring low on their performance, the residents were asked not to write their names on the exam papers. Thus, it was given up to evaluate the effects of the individual characteristics of the residents on the results.

The main analysis was to compare success rates in questions of the first two types to those in questions of the last two types. Since the questions of the first two types mentioned eponyms either in question stems or in choices, whereas the questions of the last two types used descriptions instead of eponyms, such a comparison gave an opportunity to determine which were more memorable, eponyms or descriptions. Comparisons were also done separately for each eponym, with questions restricted to each. The Wilcoxon signed-rank test was used for paired difference test, and the Spearman test was used for the correlation test. R software and its library "PairedData" were used in statistical analysis and plotting [15,16].

The study was approved by the Ethics Committee of Çukurova University, and written informed consent was obtained from all participants prior to enrollment.

RESULTS

The number of correct answers ranged from 3 to 22 in the exam composed of 24 questions. The median was 11 (interquartile range: 9–13). If only twelve questions mentioning eponyms in their stems or choices, in other words eponym-focused questions, were taken into consideration, the range of the number of correct answers was 0 to 10. The median was 3 (interquartile range: 2–4). If only twelve questions mentioning descriptions in their stems or choices, in other words description-focused questions, were taken into consideration, the range of the number of correct answers was 2 to 12. The median was 9 (interquartile range: 7–10).

The difference between the eponym-focused questions and the description-focused questions in terms of the number of correct answers was statistically significant according to the Wilcoxon signed-rank test ($p < 0.001$). The number of correct answers to the eponym-focused questions and to the description-focused ones was plotted for each participant in Figure 1. The number of correct answers to the description-focused questions was higher in all participants except one. Increments in the number of correct answers ranged from 1 to 11. The most frequent increment was 7, which was seen in 8 participants. The only participant showing decrement

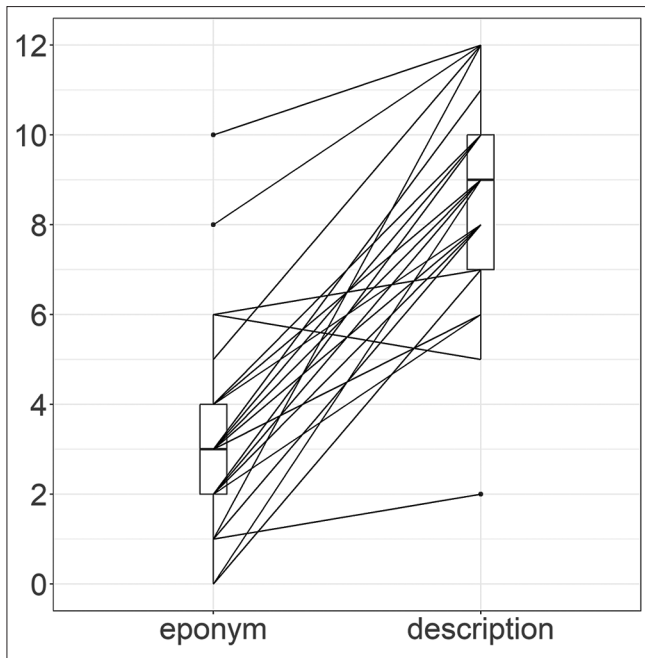


Figure 1: The number of correct answers to the eponym-focused questions and to the description-focused questions for each participant.

gave correct answers to 6 eponym-focused questions, and this figure lowered to 5 in the description-focused questions.

Since there were 25 participants and 24 questions for each participant, the total number of questions was 600. The distribution of these 600 questions according to their related signs was given in Table 1. The success rates in eponym-focused questions and in description-focused questions were equal for a sign, namely the Milian sign. The success rate in eponym-focused questions was higher for a sign, namely the Liddle sign. For the remaining 42 signs, higher success rates were observed in description-focused questions. For example, 8 eponym-focused questions and 8 description-focused questions were related to the Guérin sign. Success rates in those were 50% and 75%, respectively. Similarly, 8 eponym-focused questions and 8 description-focused questions were related to the Filipovitch sign. Success rates in those were 12% and 62%, respectively. According to the Spearman test, there was no correlation between eponym-focused questions and description-focused questions in terms of success rates ($r = 0.18, p > 0.05$).

DISCUSSION

The results of this study showed that eponyms were less memorable than descriptions, since participants,

namely residents in dermatology, gave fewer correct answers in number to eponym-focused questions than description-focused questions. Moreover, when questions related to each sign were evaluated separately, the rate of correct answers to eponym-focused questions was lower for almost all signs. Our findings support the hypothesis that there is difficulty in the retrieval of proper names [17].

Recently, numerous reviews compiling eponyms used in dermatology have been published. A striking example is an article series written by Piotr Brzeziński and his colleagues. This series is in a dictionary format composed of over thirty articles beginning to be published in 2010 and continuing until 2020 [18,19]. In a recent study, trends in dermatology eponyms were examined in a PubMed-based search [20]. It was found that citations of dermatology-focused eponyms increased in a parallel course to that of all citations from 1880 to 2020. In a recent review, arguments for both abandoning and maintaining eponyms were mentioned while discussing the value of eponyms in dermato-trichological nomenclature [21].

Not only for dermatology but also for all medicine, it is a current topic to discuss whether or not eponyms should be maintained [22-29]. The main reason that some advocate for maintaining the use of eponyms is to honor the discoverers. They also assume eponyms are more practical, since they are usually shorter than descriptive terms. However, there is a law about eponymy named after Stigler [30]. He said, “no scientific discovery is named after its original discoverer.” He gave his eponym as an example of this law, since others have also reached this conclusion previously.

An example of Stigler’s law in dermatology is a well-known sign, namely the Auspitz sign. Kaposi stated in his textbook that easy bleeding in psoriatic lesions had been known since Willan, who was the founder of modern dermatology [31]. He added that bleeding of psoriatic lesions after removing scales was mentioned by Hebra, who was the mentor of both Auspitz and himself. On the other hand, acantholytic cells are not known by the name of Auspitz, despite the fact that he was the first user and describer of this histopathological term [32].

Although defenders of eponymy suppose that proper names are more useful in practice, the present study showed that they are less memorable. Besides difficulty in learning and remembering proper names, there may be a competition in their retrieval [17]. A well-known

Table 1: The distribution of correctly answered questions and all questions according to their related signs

| Sign | Number of questions | | | | Sign | Number of questions | | | |
|-------------|---------------------------|------|----------------------|-------|-------------|---------------------------|------|----------------------|-------|
| | correct answers/total (%) | | | | | correct answers/total (%) | | | |
| | Eponym- focused | | Description- focused | | | Eponym- focused | | Description- focused | |
| Barnett | 4/10 | (40) | 3/3 | (100) | Krisovski | 0/9 | (0) | 5/8 | (62) |
| Battle | 5/8 | (62) | 3/3 | (100) | Liddle | 2/4 | (50) | 4/9 | (44) |
| Berliner | 2/6 | (33) | 8/10 | (80) | Love | 2/4 | (50) | 6/7 | (86) |
| Besnier | 1/5 | (20) | 7/7 | (100) | Maroni | 2/11 | (18) | 4/5 | (80) |
| Biederman | 2/8 | (25) | 1/1 | (100) | Meffert | 0/9 | (0) | 4/6 | (67) |
| Borsieri | 0/9 | (0) | 5/6 | (83) | Milian | 3/8 | (38) | 3/8 | (38) |
| Brenner | 1/8 | (12) | 4/5 | (80) | Mizutani | 3/10 | (30) | 3/4 | (75) |
| Buschke-O.* | 2/8 | (25) | 2/6 | (33) | Nagayama | 2/8 | (25) | 3/5 | (60) |
| Casal | 2/4 | (50) | 9/10 | (90) | Nazzaro | 1/7 | (14) | 3/5 | (60) |
| Crowe | 1/7 | (14) | 5/5 | (100) | Orentreich | 4/10 | (40) | 3/3 | (100) |
| Filipovitch | 1/8 | (12) | 5/8 | (62) | Patrick Y.‡ | 2/4 | (50) | 6/10 | (60) |
| Fox | 5/9 | (56) | 6/7 | (86) | Pittaluga | 1/4 | (25) | 6/9 | (67) |
| Frank | 2/6 | (33) | 3/4 | (75) | Premalatha | 3/7 | (43) | 4/5 | (80) |
| Giovannini | 3/9 | (33) | 1/2 | (50) | Russell | 2/9 | (22) | 3/7 | (43) |
| Greenhow | 0/5 | (0) | 6/6 | (100) | Samitz | 0/4 | (0) | 4/10 | (40) |
| Guérin | 4/8 | (50) | 6/8 | (75) | Shelly | 0/5 | (0) | 6/10 | (60) |
| Hildreth | 2/5 | (40) | 8/9 | (89) | Shuster | 1/8 | (12) | 4/6 | (67) |
| Hoagland | 2/6 | (33) | 2/2 | (100) | Silex | 2/6 | (33) | 8/9 | (89) |
| Ingram | 2/5 | (40) | 11/12 | (92) | Tasleem | 0/3 | (0) | 8/9 | (89) |
| Jacquet | 0/4 | (0) | 8/9 | (89) | Vieira | 1/5 | (20) | 3/11 | (27) |
| Joffroy | 1/6 | (17) | 5/10 | (50) | Walzel | 1/7 | (14) | 3/5 | (60) |
| Kaposi-S.† | 0/5 | (0) | 10/12 | (83) | Zireli | 3/9 | (33) | 4/4 | (100) |

*, Buschke–Ollendorff; †, Kaposi–Stemmer; ‡, Patrick Yesudian

example is “Moses illusion.” A substantial proportion of people who are asked, “how many animals of each kind did Moses take on the Ark?” respond with “two” rather than “none,” since they fail to distinguish that the subject of the question should have been Noah. Such a replacement may be a result of mislearning. In a survey, 93 consultants or registrars in orthopedic surgery were questioned about Finkelstein’s test [33]. Among them, 84 reported that they used it in their practice. However, 83 participants were unable to recognize the correct method between three descriptive pictures. The misrecognition was found to be due to misinformation in the literature, because Leao quoted Eichhoff’s manoeuvre as Finkelstein’s test in 1958 [34].

In the present study, the design of the exam consisting of 24 multiple-choice questions and using a different set of questions for each participant may be a limitation. In further studies, some changes in the design may be tried, such as increasing the number of questions, preferring open-ended questions instead of multiple-choice questions, and using only a single set of questions for all participants. All that aside, the main limitation of the present study was its short duration. A longitudinal study spanning the whole duration of the training will provide more precise results.

CONCLUSION

As arguments for abandoning eponyms, it is undoubtedly important that some eponyms are connected to Nazi

medicine, most eponyms celebrate European or North American physicians, and women account only for a minority of eponyms [22,29]. However, the destiny of eponyms should be determined according to the results of new studies investigating the cognitive aspects of eponymy, as attempted in the present study.

Statement of Human and Animal Rights

All the procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the 2008 revision of the Declaration of Helsinki of 1975.

Statement of Informed Consent

Informed consent for participation in this study was obtained from all patients.

REFERENCES

- Freiman A, Kalia S, O’Brien EA. Dermatologic signs. *J Cutan Med Surg.* 2006;10:175-82.
- Patel LM, Lambert PJ, Gagna CE, Maghari A, Lambert WC. Cutaneous signs of systemic disease. *Clin Dermatol.* 2011;29:511-22.
- Madke B, Nayak C. Eponymous signs in dermatology. *Indian Dermatol Online J.* 2012;3:159-65.
- Pradhan S, Madke B, Singh AL, Kabra P. Less-known clinical signs in dermatology. *Indian Dermatol Online J.* 2016;7:421-23.
- Rastogi V, Singh D, Tekiner H, Ye F, Mazza JJ, Yale SH. Abdominal physical signs of inspection and medical eponyms. *Clin Med Res.* 2019;17:115-26.
- Kulkarni AS, Birangane RS, Parkarwar PC, Kazi AZ. Clinical and radiological signs of importance for the oral physician and oral surgeon. *J Indian Acad Oral Med Radiol.* 2019;31:257-62.
- Das A, Toshniwal A, Madke B. Newer signs in dermatology [2016-

- 2020]. Indian Dermatol Online J. 2020;12:342-45.
8. Sharma S, Khaitan BK, Kumarasinghe SP. Cutaneous signs in dermatological diseases: An overview. Indian J Dermatol. 2021;66:530-39.
 9. Ramesh H, Somashekar S. The unsung signs of dermatology. Indian J Dermatol. 2021;66:705-10.
 10. Amrani A, Sil A, Das A. Cutaneous signs in infectious diseases. Indian J Dermatol Venereol Leprol. 2022;88:569-75.
 11. Mancy A. Handbook of signs in clinical dermatology. 2nd ed. Haditha (Iraq): Al-Yusr Press; 2023.
 12. Polra RV, Tandel JJ, Shah MM, Nair PA. Signs in dermatology: Clinical, dermoscopic, and histopathological. Clin Dermatol Rev. 2024;8:273-89.
 13. Kassam K, Kumar M. The importance of oral examination facial trauma: Recognition of the Guerin sign in Le Fort 1 injuries. Clin Case Rep. 2014;2:112.
 14. Veasey JV, de Macedo PM, Amorim JR, Orofino-Costa R. The correct nomenclature of Zireli sign in the propaedeutics of pityriasis versicolor (in memoriam). An Bras Dermatol. 2021;96:591-94.
 15. R Core Team (2024). R: A Language and Environment for Statistical Computing. R Foundation for Statistical Computing, Vienna, Austria. Available from: <https://www.R-project.org/>. Accessed Jan. 12, 2025.
 16. Champely S (2018). PairedData: Paired Data Analysis. R package version 1.1.1. Available from: <https://CRAN.R-project.org/package=PairedData>. Accessed Jan. 12, 2025.
 17. Abrams L, Davis DK. Competitors or teammates: How proper names influence each other. Curr Dir Psychol Sci. 2017;26:87-93.
 18. Brzeziński P. Dermatology Eponyms – Phenomenon/sign – Dictionary (A). N Dermatol Online. 2010;1:34-5.
 19. Brzeziński P, Martini L, Sood S. Dermatology Eponyms – sign – Lexicon (Y). Our Dermatol Online. 2020;11:e181.1-e181.2.
 20. He L, Cornish TC, Kricka LJ, Vandergriff TW, Yancey K, Nguyen K, et al. Trends in dermatology eponyms. JAAD Int. 2022;7:137-43.
 21. Trüeb RM. Value of eponyms in dermato-trichological nomenclature. Skin Appendage Disord. 2018;4:71-77.
 22. Woywodt A, Matteson E. Should eponyms be abandoned? Yes. BMJ. 2007;335:424.
 23. Whitworth JA. Should eponyms be abandoned? No. BMJ. 2007;335:425.
 24. Collier R. Eponymy: Make that Hippocrates-Janin-Neumann-Reis-Bluthe-. -Behcet's disease. CMAJ. 2012;184:1878-80.
 25. Ferguson RP, Thomas D. Medical eponyms. J Community Hosp Intern Med Perspect. 2014;4.
 26. Chaudhary H, Silaj K. What's in an eponym? The ethics and efficacy of eponym use in education. UCLA Psychology [serial online]. 2021 [cited 2025 Jan 1]. Available from: <https://sites.lifesci.ucla.edu/psych-pia/2021-10-7-whats-in-an-eponym-the-ethics-and-efficacy-of-eponym-use-in-education>
 27. Barthakur R, Dawka S. Eponyms in medicine: A Socratic dialogue. Glob J Med Pharm Biomed Update. 2022;17.
 28. Barr J, Mangold A. Call it as it is: Why medical education should reconsider disease eponyms. Med Teach. 2024;46:1108-10.
 29. Nedumannil L, Lewis D. Should medical eponyms continue to be used in everyday practice? Med J Aust. 2024;221:297-98.
 30. Stigler, SM. Stigler's law of eponymy. Trans N Y Acad Sci. 1980;39:147-57.
 31. Kaposi M. Pathologie et traitement des maladies de la peau. Tome 1. 2nd ed. Paris: G. Masson; 1891:542-43.
 32. Shareef S, Shareef F, Tongdee E, Florez-White M. Acantholysis or the Auspitz sign? A revelation of the life of Carl Heinrich Auspitz. Indian J Dermatol Venereol Leprol. 2017;83:512.
 33. Wascem M, Khan M, Hussain N, Giannoudis PV, Fischer J, Smith RM. Eponyms: Errors in clinical practice and scientific writing. Acta Orthop Belg. 2005;71:1-8.
 34. Leao L. De Quervain's disease: A clinical and anatomical study. J Bone Joint Surg Am. 1958;40-A:1063-70.

Copyright by Salkin Cinki Ayse Irem, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Source of Support: This article has no funding source.

Conflict of Interest: The authors have no conflict of interest to declare.