

Hideko Kamino and the eponym linked to her name

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UDC 61:929 Kamino H.
UDC 616.5-006



Abstract

In 1979, Kamino and colleagues described pink globules, in the epidermis of Spitz nevi. These globules, later known as Kamino bodies, were PAS-positive, diastase-resistant, and positive on trichrome staining. Their presence does not rule out malignant melanoma completely, but makes it less likely, since similar globules were noted in the epidermis in only 2% of malignant melanomas and 0.9% of ordinary melanocytic nevi. The globules in malignant melanomas and ordinary melanocytic nevi were negative with PAS and trichrome staining. In 2010, Dr. Hideko Kamino, received the Walter R. Nickel Award for Excellence in the Teaching of Dermatopathology. This short communication is about Professor Kamino and the dermatopathological condition that bears her name.

Key words

Dermatology; Pathology; Nevus, Epithelioid and Spindle Cell; Awards and Prizes, Non MeSH: Kamino Bodies

Hideko Kamino (Figure 1) is a world-renowned American dermatopathologist who was born to Japanese parents (1). Among her great medical contributions, she is credited for describing eosinophilic globules in cases with Spitz nevus (2), later known as Kamino bodies (3-5). This short communication is about Professor Kamino and the dermatopathological condition that bears her name.

Kamino bodies are pale eosinophilic globules (now known to comprise basement membrane material) that stain positively with periodic acid-Schiff and trichrome and are commonly found in the dermal-epidermal junction of Spitz nevi. The eosinophilic nature of these structures is often obscured by melanin pigmentation.

Kamino bodies are hyaline structures that are seen in skin biopsies of Spitz nevi. Their presence does not rule out malignant melanoma completely, but makes it less likely. Kamino bodies were once believed to have been degenerated basal cells or melanocytes. However, studies have shown that they comprise

collagen (type 1V and VII), laminin, and fibronectin, among other substances.

In 1979, Kamino and colleagues described dull pink globules in the epidermis of 65% of junctional, 75% of compound, and 25% of intradermal types of Spitz nevi (the nevi of large spindle and/or epithelioid cells). These globules were PAS-positive, diastase-resistant, and positive on trichrome staining. Similar eosinophilic globules were noted in the epidermis in only 2% of malignant melanomas and 0.9% of ordinary melanocytic nevi. The globules in malignant melanomas and ordinary melanocytic nevi were negative with PAS and trichrome staining.

Kamino and colleagues concluded that PAS- and trichrome-positive eosinophilic globules in the epidermis can aid in the histological differentiation of Spitz nevus from malignant melanoma.

In a latter publication (6), Dr. Kamino studied 9 cases of Spitz nevi of compound type, which had large homogeneous eosinophilic globules at the dermoepidermal junction. All 9 cases were positive



Figure 1. Hideko Kamino, a world-renowned American dermatopathologist who was born to Japanese parents

for fibronectin by indirect immunofluorescence. The study demonstrated that fibronectin, which is present in the extracellular matrix, is expressed in a homogeneous pattern in the eosinophilic globules of Spitz nevi.

Kamino bodies are common in Spitz nevi. However, in 2 recent studies (4,5), Kamino bodies were observed in a minority (11% to 34%) of Spitz nevus cases.

Dr. Hideko Kamino is currently an Associate Professor of Dermatology and Pathology at the New York University School of Medicine (1). Dr. Kamino graduated with honors from the National Autonomous University of Mexico and trained in dermatology at the Institute of Tropical Diseases in Mexico City,

sponsored by the National Autonomous University of Mexico (1). She did her anatomic pathology training at the Mount Sinai Hospital in New York City and University of California in Los Angeles. Her dermatopathology fellowship was performed with Dr. A. Bernard Ackerman at New York University.

Dr. Kamino has been a director of dermatopathology and a director of the dermatopathology fellowship training programs at the Duke University and New York University. She has presided over many associations, most notably the American Society of Dermatopathology. Dr. Kamino has published more than 100 papers in peer-reviewed journals and authored several book chapters. During her academic career, her passion has been teaching residents and fellows, for which she has received several awards from the Duke University and New York University (1).

In 2010, Dr. Kamino received the Walter R. Nickel Award for Excellence in the Teaching of Dermatopathology, which is awarded annually to honor an individual who has made great contributions to the education of dermatopathology (1).

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Hideko Kamino i eponim vezan za njeno ime

Sažetak

Uvod: Ovaj rad posvećen je profesorki Kamino i dermatopatološkom fenomenu koji je otkrila i prva opisala, nazvanom njoj u čast, Kamino telašca.

Dr. Hideko Kamino: Doktorka Kamino je vanredni profesor dermatologije i patologije na Medicinskom fakultetu Univerziteta u Nju Jorku. U 2010. godini, Dr Kamino dobila je prestižnu nagradu Walter R Nickel za maestralno održana predavanja iz oblasti dermatopatologije.

Kamino telašca: Dr Kamino je sa saradnicima 1979. godine opisala svetlo ružičaste globule, kasnije nazvane Kamino telašca u epidermisu 65% junkcionih, 75%

složenih i 25% intradermalnih tipova Spitz nevusa. Ove globule bile su PAS-pozitivne, dijasstaza rezistentne i trihom-pozitivne. Prisustvo eozinofilnih globula u epidermisu se može dokazati kod samo 2% malignih melanoma i 0.9% običnih melanocitnih nevusa ali su globule PAS-negativne i trihom-negativne.

Zaključak: Kamino i saradnici zaključili su da PAS-pozitivne i trihom-pozitivne eozinofilne globule u epidermisu mogu olakšati histološku diferencijaciju Spitz nevusa od malignog melanoma: njihovo prisustvo smanjuje verovatnoću da se radi o malignom melanomu ali ga u potpunosti ne isključuje.

Ključne reči

Dermatologija; Patologija; Epitelni nevus vretenastih ćelija; Priznanja i nagrade, Ne MeSH: Kamino telašca