Letter to the Editor *doi: 10.5455/medscience.2015.04.8287*

Supernumerary Nipple Children with Different Types of Malignancies

Sevcan Bozdogan[1], Eda Bengi Yilmaz[2], Elvan Caglar Citak[3]

[1] Mersin University, Medicine Faculty, Department of Medical Genetics, Mersin, Turkey

[2] Mersin University, Medicine Faculty, Department of Radiation Oncology, Mersin, Turkey

[3] Mersin University, Medicine Faculty, Department of Pediatric Oncology, Mersin, Turkey

Abstract

Keywords:

(Rec.Date:Mar 06, 2015 Accept Date:Apr 27, 2015)

Corresponding Author*:* Sevcan Bozdogan, Mersin University, Medicine Faculty, Department of Medical Genetics, Mersin, Turkey
E-mail: sevcantb@gmail.com

Supernumerary Nipple Children with Different Types of Malignancies

A supernumerary nipple (SN), usually arises within the embryonic milk lines but can also occur in locations such as back, thigh, vulva and neck [1,2]. The frequency of SN ranges from 0.2% to 5.6% depending on various factors [3]. Although much has been written on the association of SN with other conditions, it still remains as a controversial and speculative area. SN can be associated with several disorders notably urological malformations and urogenital malignancies [1,3,4]. To the our knowledge, the association of SN with childhood cancer has rarely been reported before [5,6].

One hundred forty five children (mean age 9.63±5.90) with cancers were examined for any abnormal pigmentation along the embrionic milk lines and ectopic supernumerary nipples by pediatric oncologist, radiation oncologist and clinical geneticist. So far, we detected SN in 11 (7.58%) patients (mean age: 9.35±4.69) with various childhood cancers (Non-Hodgkin's lymphoma [*n* = 3], Hodgkin lymphoma [*n*=2], ALL [*n* =2], acute megacaryoblastic leukemia [*n*=1], neuroblastoma [*n*=1], germ cell tumor [*n*=1], and hepatoblastoma [*n*=1]). The summary of clinical and laboratory findings of the patients are shown in Table 1. In Pediatric Oncology and healthy children unit 1200 children (mean age: 9.56±6.12) who had neither cancer nor genetic syndromes were examined and had no SN accepted as a control group. There is no statistical difference for age between the controls and patients ($p>0.05$). We also found SN is more common in children with leukemia and lymphoma than other solid tumors. So we believe that; association of SN with cancer is not coincidence. The presences of SN were described as a malformation by Merks et al [7]. Also; in classical textbooks and comprehensive compilations the anomalies in association with SN are categorized based on organ systems [4]. However, as far as we know oncological cases are not among these categories. According to our observations, we suggest that the "oncological diseases" might be added to the list of these categories.

Minor anomalies or extreme phenogenetic variants may be interpreted as indirect indicators of genetic instability, and these minor errors might be the products of developmental genes and their teratogenic effects. Estimating the real prevalence of this minor anomaly is quite difficult [8].

SN can be sporadical or familial. They are associated with benign anomalies, congenital syndromes and malignant neoplasms [9]. In conclusion, we think that it is important to check this minor malformation-SN during the physical examination of the newly diagnosed children to correlate the SN and these malignancies.

References

1. Brown J, Schwartz RA. Supernumerary nipples. An overview. Cutis. 2003;71(5):344-6.
2. Lewis EJ, Crutchfield CE, Prawer SE. Accessory nipples and associated conditions. Pediatr Dermatol. 1997;14(4):333-4.
3. Ferrara P, Giorgio V, Vitelli O, Gatto A, Romano V, Del Bufalo F, Nicoletti A. Polythelia: Still a marker of urinary tract anomalies in children? Scand J Urol Nephrol. 2009;43(1):47-50.
4. Cohen PR, Kurzrock R. Miscellaneous genodermatoses: Beckwith-Wiedemann syndrome, Birt-Hogg-Dube syndrome, familial atypical multiple mole melanoma syndrome, hereditary tylosis, incontinentia pigmenti, and supernumerary nipples. Dermatol Clin. 1995;13(1):211-29.
5. Aslan D, Gursel T, Kaya Z. Supernumerary nipples in children with hematologic disorders. Pediatr Hematol Oncol. 2004;21(5):461-3.
6. Aslan D, Hiçsönmez G; Supernumararay nipple in a child acute lymphoblastic leukemia. Pediatr Hematol Oncol. 2000;6:369-71.
7. Merks JHM, van Karnebeek CDM, Caron HN, Hennekam RC. Phenotypic abnormalities: terminology and classification. Am J Med Genet A. 2003;123A(3):211-30.
8. Roganovic J, Radojcic-Badovinac A, Ahel V. Increased prevalence of minor anomalies in children with hematologic malignancies. Med Pediatr Oncol. 2002;38(2):128-30.
9. Grimshaw EC, Cohen PR. Supernumerary nipple and seminoma: case report and review of polythelia and genitourinary cancers. Dermatol Online J. 2013;19(1):4.