

Frequency of "stardust pattern" as an evolutive dermoscopic pattern of pigmented Spitz nevi during childhood.

Version 2.0

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# Conflict of interest

<b>Funding Sources</b>
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none

Financial or personal interest related to the proposed study

none

Interest in intellectual property rights subject of the study

none

Is a drug, device or other investigational product being used or evaluated?

no

## Study design

### Study type

**Retrospective Case-Series** 

#### Checklist

none

#### Study Outline

#### **Background**

Spitz naevi (SN) are benign melanocytic lesions typical of childhood/adolescence that can mimic melanoma on a clinical, dermoscopic and histopathologic level. Moreover, SN are often characterized by rapid growth and worrisome changes. Thus, their diagnosis and management may be challenging. The knowledge on prognosis and natural history of SN improved substantially in the last few years thanks to dermoscopy and a better understanding of clinic–pathologic correlations.

It has been previously demonstrated that the majority of pigmented and non-pigmented Spitz naevi tend to disappear over time. However, it is still not clear what changes in the baseline dermoscopic pattern become visible in SN before final involution.

In a recent retrospective observational study, a new dermoscopic pattern has been described, being found in a significant number (68%) of SN with starburst pattern that were monitored over time. This pattern is characterized by a central, black to grey, structureless or reticular, hyperpigmented area and remnants of a delicate brown network at the periphery. The analytic description of this pattern might be summarized by the metaphoric term 'stardust pattern', which can be useful to recall the most common evolution of the 'starburst' pattern.

As today many dermatologists are prone to perform follow-up of Spitz nevi in prepuberal children, being aware on the frequency of observation of this pattern and its reproducibility between clinicians may be useful for clinical practice.

#### Study design

Clinical and dermoscopic images of prototypical cases are attached to this protocol in order to help clinicians recognizing the stardust pattern.

#### Inclusion criteria:

- clinical and/or histopathologic diagnosis of Spitz naevus with starburst appearance in children <12 years old</li>
- availability of a dermoscopic image at baseline and after follow-up of at least 1 year
- availability of demographic patient info (sex, age at baseline, age at follow-up) and lesion location
- availability of info on follow-up duration

The dermoscopic images will be assessed by three evaluators in consensus, with stardust feature scored as present when at least two of them are in agreement. Cases that will not be assessed as starburst pattern will be excluded.

#### Recorded data

Dermatoscopic images Age and sex of the patient

### Methodology of data collection

Any physician who observed a case of starburst Spitz naevus with follow-up images may send the clinical and dermoscopic images to the study coordinator (<a href="mailto:gabri.brancaccio@gmail.com">gabri.brancaccio@gmail.com</a>) together with the requested additional info (see inclusion criteria).

# Statistical evaluation plan

Images and cases will be centrally evaluated for feasibility. Statistical analysis will regard:

- population characteristics (median age, sex);
- total number of cases;
- time to the first follow-up visit in which the lesion shows starburst features;
- time to the first follow-up visit in which the lesion shows stardust features;
- median follow-up duration.

# **Ethics**

Central ethics review already in place?

N/A

Informed Consent Form

N/A

Ethics and Data security considerations

N/A

# Authorship and compensation

## Criteria for co-authorship

Providing at least 5 case

## Criteria for named contribution

Providing at least 1 case

### Other compensations planned

none

### Accessibility of results

Results and the related paper will be available to all the IDS members and hopefully published on the official journal of the society, Dermatology Practical and Conceptual.

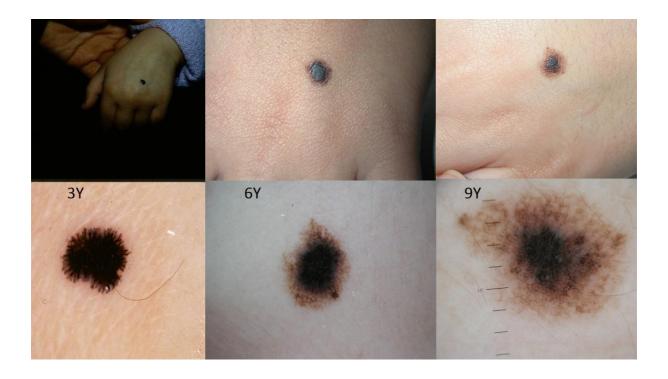
## Data availability after publication

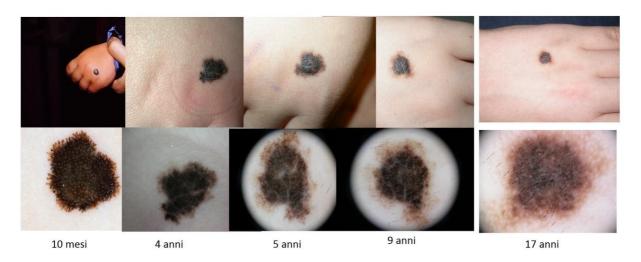
This case-series may pave the way to other structured researches on the topic in which the incidence of stardust pattern may be analyzed in an expanded cohort of cases of spitz nevi and compared to other pattern of spitz nevi evolution.

### Resources

## Requested resources from the IDS

None





Both the images show clinical and dermoscopic features at baseline and follow-up of Spitz nevi evolving into a stardust pattern.

At baseline, the lesions were dermoscopically characterized by a starburst pattern.

After a median follow-up of 4 years, a tiny brown network was visible at the periphery of a central black homogeneous area.

Once stabilized, both nevi show a central, black, reticular, hyperpigmented area surrounded by remnants of a delicate brown network (stardust pattern).