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# CASE REPORTS AND STUDIES ON PITYRIASIS ROSEA – FROM NUMBER OF PATIENTS TO META-ANALYSES AND DIAGNOSTIC CRITERIA

OPISY PRZYPADKÓW I BADANIA NAD PITYRIASIS ROSEA - OD LICZBY PACJENTÓW DO META-ANALIZ I KRYTERIÓW DIAGNOSTYCZNYCH

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Sir,

We read with admiration the case report by Brzezinski and Sinjab on pityriasis rosea (PR) in a 12-month-old infant [1]. Despite more than a century of research, the underlying viral aetiologies, immunopathogenesis, diagnostic methods, specific diagnostic investigations, and optimal evidence-based management of PR are not yet within reach. There exist many case reports which, like the present report, are outstanding in supplementing individual clinical data to original studies on PR.

However, original studies in PR [2-4] were typically performed on a relatively small number of patients, say below 100 patients. Owing to these small numbers, the powers of individual studies are low. Theoretically, these studies can be meta-analysed to achieve high statistical powers and high clinical significance. However, a Cochrane review [5] has pointed out that such meta-analyses cannot be validly performed as the diagnosis of PR is clinical and various investigators adopt different inclusion and exclusion criteria in their studies. The high heterogeneity between study populations limits not only meta-analyses but also systematic reviews. We have previously reported a study on 1379 patients with PR [6]. However, we admit that as our data was from three geographical locations with differing diagnostic criteria, the heterogeneity of these patients was high.

Based on our previous experience on validating a diagnostic

criteria for another paraviral exanthem, namely Gianotti-Crosti syndrome [7, 8], we have proposed a diagnostic criteria for typical and atypical PR [9, 10] (Tab. I). Despite this case report [1] not being a formal research study, we believe that the application of a diagnostic criteria is useful. If it is stated in many future case reports that the exanthems of the patients (be they being infants, children or an adults) fulfil or do not fulfil the diagnostic criteria, the data of case reports adopting the same diagnostic criteria will be of low heterogeneity, and therefore can be meta-analysed and systematically reviewed with regard to aetiology, immunopathogenesis, and management strategies.

For this infant in concern [1], we believe that the rash fulfils all the three essential clinical features (discrete annular lesions, scaling, peripheral collarette scaling with central clearance on at least two lesions), all three optional clinical features (relative truncal distribution, orientation along skin cleavage lines, herald patch), and none of the exclusional clinical features. This case thus fulfils the set of diagnostic criteria as a whole [9, 10].

We advocate future authors PR to try and apply this criteria for case reports and original studies on PR. We are working on validation studies for the diagnostic criteria of PR. We would welcome comments, suggestions and expressions of interest in validation studies by prospective authors working on this disease.

A patient is diagnosed as having pityriasis rosea if:

- On at least one occasion or clinical encounter, he / she has all the essential clinical features and at least one of the optional clinical features, and
- On all occasions or clinical encounters related to the rash, he / she does not have any of the exclusional clinical features.

## The essential clinical features are:

- 1. Discrete circular or oval lesions,
- 2. Scaling on most lesions, and
- 3. Peripheral collarette scaling with central clearance on at least two lesions.

## The optional clinical features are:

- Truncal and proximal limb distribution, with less than 10% of lesions distal to mid-upper-arm and mid-thigh,
- 2. Orientation of most lesions along skin cleavage lines, and
- 3. A herald patch (not necessarily the largest) appearing at least two days before eruption of other lesions, from history of the patient or from clinical observation.

## The exclusional clinical features are:

- Multiple small vesicles at the centre of two or more lesions,
- 2. Two or more lesions on palmar or plantar skin surfaces, and
- 3. Clinical or serological evidence of secondary syphilis.

Table I. Proposed diagnostic criteria for pityriasis rosea [9, 10]

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