

# Erythrasmoid pityriasis versicolor: three case reports and review of the literature

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## Abstract

Pityriasis versicolor is clinically characterized by slightly scaly, hyper- or hypopigmented macules usually located on the chest, shoulders, back, and arms. Rare cases of atypical locations of pityriasis versicolor have been described, such as groins, penis, and perineum. We present three cases of pityriasis versicolor located exclusively on the submammary folds, pubis, and inguinal

folds (the latter in an 11-year-old girl), respectively. Considering both the location and clinical presentation of pityriasis versicolor in these three patients, we think the diagnosis of erythrasmoid pityriasis versicolor is acceptable. Differential diagnosis with erythrasma must be taken into consideration. Therefore, mycological and bacteriological examinations are necessary for a correct diagnosis and specific therapy.

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## Introduction

Pityriasis versicolor (PV) (tinea versicolor) is a common, superficial skin infection caused by *Malassezia sp.*. The latter consists of several subspecies that belong to the normal cutaneous flora, particularly in areas rich in sebaceous glands. *Malassezia sp.* can convert from saprophyte to pathogenic yeast when some predisposing factors occur, such as a hot-humid environment (PV is more frequent in tropical and subtropical countries), hyperhidrosis, organ transplants, therapies with antibiotics, corticosteroids, and immunosuppressive drugs.<sup>1</sup> PV is characterized clinically by slightly scaly, hyper- or hypopigmented macules located on the chest, shoulders, back, and arms.<sup>1</sup> Rare cases of atypical locations of PV have been described, such as groins, penis, and perineum.<sup>2-21</sup> To our knowledge, no cases of PV involving exclusively the submammary folds have been reported, and only one case of PV involving uniquely the pubis has been described.<sup>16</sup> We present three cases of erythrasmoid pityriasis versicolor located exclusively on the submammary folds, pubis, and inguinal folds (the latter in an 11-year-old girl), respectively.

## Case Reports

### Case #1

An 18-year-old Caucasian female was admitted because of a pigmentation located on the submammary folds. The patient reported that she was feeling well and not undergoing therapy with systemic drugs. Dermatitis appeared approximately one year earlier; it was unsuccessfully treated at other centers with topical corticosteroids.

Dermatological examination revealed two symmetrical macules located on the submammary folds. They were brownish in color, with fine scaling and irregular, well-defined borders (Figure 1). The patient complained of severe itching. No other lesions were observed elsewhere.

Laboratory examinations were within normal ranges. Wood's lamp examination revealed a yellow fluorescence. Microscopical examination with 10% potassium hydroxide showed several round spores and septate and short hyphae. Bacteriological examination was negative.

A diagnosis of PV located exclusively on the submammary folds was made. The patient was successfully treated with iso-

conazole cream (1 application/day for three weeks) and oral itraconazole (200 mg/day for ten days). Follow-up at six months was negative for recurrences.

### Case #2

A 38-year-old Caucasian female was admitted because of a dermatitis located on the pubis. She was in good general health, and she was not in therapy with systemic drugs. She declared that the dermatitis had appeared approximately four months earlier and that it had not previously been treated.

Dermatological examination showed a macule located on the pubis: it was orange-ochre in color, with fine scaling and well-defined borders (Figure 2). The patient complained of mild itching. No other lesions were observed elsewhere.

Laboratory examinations were within normal limits. Wood's lamp examination showed a yellowish fluorescence. Microscopical examination with 10% potassium hydroxide revealed several round yeast spores and septate and short hyphae. Bacteriological examination was negative.

A diagnosis of PV located exclusively on the pubis was made. The patient was successfully treated with a shampoo containing tioconazole and zinc pyrithione (1 cleaning/day for three weeks). No recurrence was observed during a six-month follow-up.

### Case #3

An 11-year-old Caucasian girl was admitted because of a dermatitis located on the inguinal folds. The patient's parents stated that she was in good general health and that she was not in therapy with systemic drugs. The dermatitis appeared approximately three weeks earlier and was previously treated with zinc oxide, although unsuccessfully.

Dermatological examination showed several macules located on the inguinal folds and inner surfaces of the thighs: they were brownish in color, with irregular borders (Figure 3). The patient complained of mild itching. No other lesions were observed elsewhere.

Laboratory examinations were within normal limits. Wood's lamp examination showed a yellowish fluorescence. Microscopical examination with 10% potassium hydroxide revealed several round yeast spores, septate, and short hyphae. Bacteriological examination was negative.

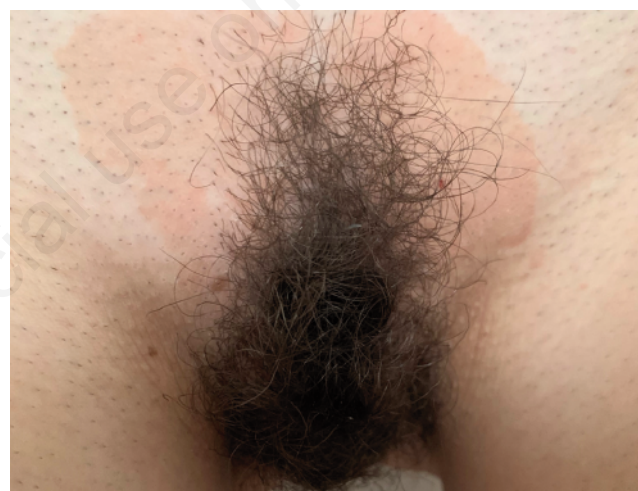
A diagnosis of PV located exclusively on the inguinal folds and thighs was made. The patient was successfully treated with a shampoo containing tioconazole and zinc pyrithione (1 cleaning/day for three weeks). Follow-up at four months was negative.

## Discussion and Conclusions

Submammary folds, pubis, and inguinal folds are very rare locations of PV. As previously mentioned, only one case of PV located exclusively on the pubis was reported.<sup>16</sup> In addition, no cases of PV involving uniquely the inguinal folds were described. Considering both the location and clinical presentation of PV in these three patients, we think the diagnosis of erythrasma PV can be acceptable.<sup>15</sup> However, we must not forget the possibility that PV and erythrasma can coexist, as reported by some authors.<sup>18</sup> As previously mentioned, the search for *Corynebacterium minutissimum* was negative in all patients. Mycological and bacteriological examinations are therefore necessary in order to make a correct diagnosis and specific therapy.



**Figure 1.** Pityriasis versicolor located exclusively on the submammary folds.



**Figure 2.** Pityriasis versicolor located exclusively on the pubis.



**Figure 3.** Pityriasis versicolor located on the inguinal folds in an 11-year old girl.

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