

abdominal pain for a median duration of 11 months (range 6-36 months). Other symptoms included nausea in 23%, anorexia in 19% and constipation in 15% of patients. **Table 1** shows the laparoscopic and pathologic findings. All patients had uncomplicated hospital courses, with the mean hospital stay of  $1.5 \pm 0.5$  days (range of 1-4 days). The mean follow up time was  $5.5 \pm 0.6$  months. All patients were symptom free, except one lady who suffered from one episode of abdominal pain after 3 months postoperatively, which was secondary to ruptured ovarian cyst. **Table 1** also shows the autopsy findings in the control group. Abnormal findings were significantly more prevalent in the case group ( $p < 0.05$ ).

We consider recurrent abdominal pain to be a significant problem. Chronic appendicitis and diverticula of appendix are unusual causes of abdominal pain, which may be a significant diagnostic problem.<sup>2</sup> Clinical presentation mostly determines the cause of pain, but in a significant number of patients, the cause remains unclear.<sup>1,3</sup> Laparoscopic evaluation is a safe and beneficial method for decision making, and it may be a good tool for evaluation of appendicular masses before planning a surgical program.<sup>4</sup> In a study carried out by Agarwala and Liu,<sup>4</sup> they evaluated 1,317 women with chronic recurrent abdominal and pelvic pain with laparoscopy, and reported the abnormal findings of appendix to be endometriosis, acute appendicitis, carcinoid tumors, large mucocele, *Enterobius vermicularis* infection, benign neuroma, mucous cystadenoma, obliteration of appendicular lumen, and fibrous adhesions. Thirty percent of the cases had normal appendix, in whom pain regressed post appendectomy, and therefore, the appendix was the key organ for abdominal pain.<sup>4</sup> Our study also showed that the most common finding in patients who underwent laparoscopic evaluation due to chronic abdominal pain was related to the appendix. Laparoscopy has been reported to be a safe and effective utility in chronic abdominal pain by several authors.<sup>1-5</sup> Laparoscopy alone can also reveal the pathologic condition of patients with pain of unknown origin.<sup>5</sup> In our study, all patients benefited from laparoscopic evaluation and appendectomy.

In conclusion, laparoscopic evaluation may be a safe method for evaluation of patients experiencing chronic or unknown abdominal pain and we recommend its use in the evaluation and treatment of chronic abdominal pain.

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## Evaluation of wood's light and direct smear for diagnosis of pityriasis versicolor and erythrasma

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**E**rythrasma and pityriasis versicolor (PV) are 2 infectious skin diseases of young adults. However, PV can be seen in elderly people and occasionally in children.<sup>1</sup> There are various diagnostic methods including direct smear, scotch tape test and Wood's light.<sup>2,3</sup> Although, in most studies and texts<sup>2-5</sup> there is emphasis on the high diagnostic value of Wood's light but, some studies reject the diagnostic value of Wood's light.<sup>1</sup>

In order to evaluate routine laboratory methods of direct smear and Wood's light; the study was undertaken over a 16 months period (September 2003-December 2004), at the Departments of Mycology and Dermatology, Emam Reza Hospital, Mashhad, Iran. The study population was the patients and volunteer students from Mashhad University of Medical Sciences who referred to Dermatology Clinic, Emam Reza Hospital. Among 215 individuals, 88 patients had skin lesions suspected for PV and 127 for erythrasma. After clinical diagnosis for PV and erythrasma a questionnaire was completed for each patient, they were asked to refer to the Mycology laboratory at Emam Reza Hospital. All of the patients were tested by Wood's light in a dark room. Fresh smear by potassium hydroxide (10%) was prepared for diagnosis of PV and direct stained smear by methylene blue for erythrasma. The common sites of lesions in patients suffering from PV were trunk and neck. Among 88 individuals suspected to PV, 55 patients (62.5%) showed positive golden yellow fluorescence under Wood's light, while 59 patients (67%) had positive direct smear. Among 127

**Table 1** - The laboratory results of 88 suspected patients to pityriasis versicolor and 127 patients to erythrasma, Emam Reza Hospital, Mashhad, Iran, 2003-2004.

Methods	Skin disease		p value
	Pityriasis versicolor n (%)	Erythrasma n (%)	
Wood's light	55 (62.5)	38 (29.9)	0.001
Direct smear	59 (67)	40 (31.5)	0.001

patients with suspected lesions for erythrasma, groin was the most common site. Positive orange-red fluorescence was seen in 38 cases (29.9%), while direct stained smear of 40 cases (31.57%) showed *Corynebacterium minutissimum* (Table 1). Regarding statistical chi-square test, no significant difference was seen between Wood's light and other methods in the diagnosis of PV and erythrasma ( $p=0.001$ ). Pityriasis versicolor is a superficial mycotic disease, which is common in young people. The well recognized sites of involvement in PV are the upper trunk, neck, and upper arms, however flexural lesions are not uncommon.<sup>5</sup> Erythrasma is another skin disease with intertriginous lesions.<sup>4</sup> According to our experiments, scrotum was the second highly infected location, while in dermatology text books, scrotal involvement is not common. Although in several studies the value of Wood's light in the diagnosis of several diseases including PV, erythrasma and pigmentary changes of the skin is approved,<sup>2,5</sup> but in some studies,<sup>1</sup> the diagnostic value of this method is in doubt. In present study the diagnostic value of Wood's light is highly approved. According to Table 1, 55 individuals (62.5%) showed positive fluorescence under Wood's light, while 59 patients (67%) had positive direct smear for Malassezia. However, the difference between the 2 tests is not statistically significant. The following factors may affect the result of wood's light test: 1) the quality of ultraviolet (UV) instrument 2) the amount of room darkness during examination 3) the color of patient's cloths 4) use of topical drug, lotion, spray, shampoo, and so forth prior to the test. 5) the time of last bathing prior to examination. Considering the above statements, the examiner should have a good knowledge and experience of using wood's light. False positive and false negative fluorescence may change the result of examination.<sup>2,3</sup> According to the experience of the authors, in mixed infections with dermatophytes and *Candida*, Wood's light is not a perfect test. Final and definite diagnosis needs laboratory examination. In the other hand, observing fluorescence does not lead to final diagnosis, as another infection due to dermatophyte or *Candida* may be present, which needs extra inspection and

examination.

In conclusion, the Wood's light test is a valuable method for diagnosis of several superficial mycotic diseases. Physicians and especially dermatologists can use it as a simple and easy diagnostic technique for screening of the patients in their private clinics. In order to avoid false positive results, the physician should have good knowledge of UV positive materials and UV light wavelength. The physician should always think about the possibility of mixed infection.

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## Students' perceptions of their undergraduate medical education

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Around the world, there is a continuing debate on medical education.<sup>1</sup> In the 1980s, it was stated that "the aim of medical education is to produce doctors who will promote the health of all people..."<sup>2</sup> The Turkish Medical Association concurs that this aim is not being met in Turkey despite some changes in our medical education.<sup>3</sup> After the 6-year basic medical education, Turkish medical graduates deal with patients in primary care settings without any postgraduate education. The total population of this group is around 30,000 and