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Thesis Title	<i>Mycological study of wound infections among Iraqi patients in Baghdad city.</i>			
Year	2013			
Abstract	<p>Two hundred fifty swabs were collected from patients admitted to Burn Unit , Surgical and Plastic Surgery at Burn Specialist Hospital ,Al-Kindy Teaching Hospital , Al-Wasety Specialized Hospital , Sheik Zaed Emergency Hospital and Baghdad Teaching Hospital and they divided in to 150 swabs from burned patients and 100 swabs from other types of infected wounds (surgical ,fractures ,car accident , gun shot and other types of trauma) during the period from November 2011 till October 2012 . The handling and diagnoses of these swabs were carried out at Teaching Laboratories ,Central Health Laboratory and Ibn-Albalady Hospital.</p> <p>Three major types of wounds were seen including burn , surgical and different kinds of trauma . All isolates obtained in this study identified depending on the microscopical appearance ,colonial morphology of fungi and by using RapID™ Yeast Plus System and with some other tests ,the confirmation of these results was done by using Vitek 2 Compact System. Burn wounds were having the largest number (60%) of studied wound infections and in positive fungal cultures 92(61.33 % of total burn wound), there was 89 isolates(49.17%)of yeasts out of the total fungal isolates which isolated from all kinds of wounds 181isolates , 14 isolates(7.7%)of mold out of the total fungal isolates , the most common fungal pathogen isolated from burn wound was <i>Candida</i> spp. 49 isolates (27%) followed by <i>Cryptococcus</i> spp. 24 isolates(13.25%)and <i>Aspergillus</i> spp. 9 isolates(4.97%).</p> <p>The incidence of wound infections was high in burn patients, and dry heat 133(88.6) was the most common causes of burn wounds , burn wound was higher in females 122(81.33%) than males 28(18.66%), females were admitted to burn hospital with a history of attempted suicide 30(96.8%) more</p> <p>Summary</p>			

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than males 1(3.2%) , and there was a significant difference between them ,the difference was also significant in the prevalence of wound infections among males and females , burn injuries occurred in relation to age represented a higher percentage (60.6%) among ages (20-29) years old , while the lowest occurrence (33.3%) in ages less than one year , fungal burn infections represented a (100%) in ages less than one year , while (33.3%) was seen in ages between (1-9) years old burned patients .

The largest number of burn patients was 39(26%)with TBSA(30-39%) , the TBSA>30% was mostly infected with fungal elements(82%) ,and reach 10 fungal isolations(100%) with TBSA more than 70 % TBSA. Mortality rate in positive fungal infections was with TBSA 30-39 %(50%) and reach (100%) in 50-59 % TBSA . Infections was higher in burned patients 31(33.7%) in the second week post injury and the lower incidence in the fourth week 5(5.4%) ,the number of single isolates was 59(32.6%)and mixed isolates 46(25.4%) . While other wounds showed positive fungal cultures 75 (75%) , as 62 (34.25%) isolates of them were yeasts from all kinds of wounds 181isolates , and 14 (7.73%) isolates of them were mold , the most common fungal pathogen isolated from these wound was *Candida* spp. 40 isolates (22.09%) followed by *Cryptococcus* spp. 9 isolates(4.97%) and *Aspergillus* spp. 7 isolates(3.86%).

In other wounds the infection rate was higher in males 66(66%) than females 34 (34%) , as there was a significant difference between males and females in relation to age when represent a high percentage seen among age group(1-9) years old (20 %) , while the lowest percentage (3 %) was seen in age group less than 1year , the fungal infections occurred in relation to age represent a high percentage (100%) in patients less than one year and in age

Summary

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group (60-69) years old , while the lowest infection rate (33.3%) was seen in ages between (20-29) years old in patients suffering from other wounds.

A high percentage of patients showed infection in the second week post injury 17 (23 %) and the lowest percentage of infection seen in other wounds 2 patients (2.7 %) was in the fourth and eight weeks after injury ,the number of single isolates was 56(30.9%)and mixed isolates 20(11.0%) . Sensitivity test was done by disc diffusion method ,six antifungal discs were used (Amphotericin-B , Nystatin , Clotremazole , Ketoconazole , Fluconazole and Flucytosine) , in this study Amphotericin-B was the most antifungal effective against most fungal isolates while , Fluconazole and Flucytosine were the less effective against these isolate