Patients and surgeons may frequently misidentify biopsy sites at the time of surgery.

**Background:** Every so often, an article appears in the news media about patients who underwent surgery only to find out later that they had either the wrong procedure or the procedure was performed on the wrong site. Among the most embarrassing are the disclosures of wrong-sided procedures, which is the reason almost all hospitals now have patients mark their surgical sites with a big “X” or some other designation. In dermatology, the surgical target is usually obvious, but the usual methods to identify the site can sometimes fail, such as patient and spouse memory, diagrams, biopsy-site scars and wounds, and referring physician notes. Sometimes, biopsy sites heal so beautifully that their original locations are completely dependent on faith.

**Objective:** To determine the value of preoperative biopsy-site photography for accurately identifying surgical sites before Mohs micrographic surgery.

**Methods:** The authors included 271 surgical sites in the study. All cases involved biopsied cutaneous malignancies. Patients had received preoperative biopsy-site photography at the time of biopsy. On the actual day of the surgery, patients and physicians were asked to identify the surgical sites. Patients with memory deficits were excluded.

**Results:** Patients incorrectly identified 45 of 271 surgical sites (1/6 of cases). Physicians did a little better, incorrectly identifying only 16 of 271 surgical sites (1/16 of cases). The surgeon and the patient both incorrectly identified 12 of 271 sites, so slightly more than 1 of 25 sites was misidentified by both the patient and the physician.

**Conclusions:** There is definite value in preoperative photography for identifying surgical sites. In their discussion, the authors point out that one of the leading reasons for Mohs surgery malpractice claims (14%) was operating on the wrong site. They also note that, in their practice, time to Mohs surgery was relatively short. Practices with longer delays before surgery may have higher rates of misidentification without photography.

**Reviewer’s Comments:** Zero tolerance for this kind of surgical error is becoming standard. In our practice, we photograph all biopsy sites that have even a remote possibility of surgical follow-up. We mark the lesions in photographs either with an ink marker or a pointer touching the lesion at the time of the photograph. Two photographs are taken, one for general localization and one closer up. At the time of surgery, we identify the lesion with verification by the patient and assisting nurse, then document the finding in the operative note.

(Reviewer-David L. Swanson, MD)
Three treatments with a 595 nm laser 1 month apart are effective in significantly improving psoriatic nails.

**Background:** Psoriatic nail disease is a difficult problem, particularly in patients who are not candidates for systemic therapy. The pulsed dye laser (PDL) has been reported to be effective in the treatment of resistant plaque-type psoriasis.

**Objective:** To determine the effectiveness of a 595-nm laser for the treatment of psoriatic nails.

**Design:** Uncontrolled limited open clinical trial (small case series).

**Participants:** 5 patients with psoriatic nail dystrophy. The patients reportedly had no improvement from topical treatment, but the therapy used was not reported. The nails were involved with nail matrix disease (pitting, leukonychia, red spots in lunula, and nail plate crumbling) and nail bed disease (oil drop discoloration, onycholysis, nail bed hyperkeratosis, and splinter hemorrhaging).

**Methods:** The nails of 5 patients were treated using VBeam (Candela Laser Corp) PDL at 595 nm with a pulse duration was 1.5 ms, a beam diameter of 7 mm, and a cryogen spurt of 30 ms with a 30 ms delay. The laser energy fluence was 8.0 to 10.0 J/cm². After the nail was covered without overlapping, the application was repeated until slight purple discoloration appeared at the nail matrix and over the nail plate. Patients were treated monthly for 3 months. Clinical efficacy was statistically evaluated according to Nail Psoriasis Severity Index (NAPSI) score differences before and after treatment.

**Results:** The mean NAPSI score fell from 21.2 ± 3.5 before treatment to 3.0 ± 1.1 one month after treatment, which was statistically significant. The nail bed lesions (particularly onycholysis and subungual hyperkeratosis, which were most bothersome to the patient) responded best to the treatment. Pitting, which was least bothersome, responded the least. Slight purpura occurred after PDL application and resolved in 3 to 7 days in the treated nails. Pain was the major side effect, which lasted 24 hours.

**Conclusions:** PDL might be an alternative treatment for nail psoriasis.

**Reviewer's Comments:** Although excimer laser is the treatment we usually associate with psoriasis therapy, the 595 nm laser has also been reported to be effective. The purported mechanism is that the expanded superficial microvascular bed in psoriasis is a necessary component for maintaining clinical lesions. That bed is the target for this laser. (Reviewer-David L. Swanson, MD).

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Keywords: Laser, Pulsed Dye, Psoriasis, Nail Disease.

Print Tag: Refer to original journal article
Skin Biopsy of Infantile, Neonatal Erythrodermas

Early Skin Biopsy Is Helpful for the Diagnosis and Management of Neonatal and Infantile Erythrodermas.
Leclerc-Mercier S, Bodemer C, et al:
J Cutan Pathol 2010; 37 (February): 249-255

A skin biopsy may lead to a final diagnosis in nearly 70% of cases of neonatal and infantile erythroderma.

**Background:** The clinical presentation of infantile erythroderma is challenging and requires differentiation between inflammatory dermatoses, genodermatoses, and metabolic disorders.

**Objective:** To determine whether a skin biopsy is useful to establish the diagnosis in neonatal and infantile erythrodermas.

**Design:** Retrospective review.

**Participants:** 72 patients in the first year of life admitted for exfoliative erythroderma.

**Methods:** Retrospective review of 111 skin biopsies examined blindly by 3 pathologists. LEKTI antibody was performed on suspected Netherton syndrome biopsies. The histopathological diagnoses were compared to the clinical diagnosis confirmed by clinical follow-up and supportive laboratory and/or molecular studies.

**Results:** The histopathological patterns were grouped, and 3 major categories were identified: psoriasiform, spongiform, and ichthyosiform. A differential diagnosis was rendered in each case, and the final histopathology was compared to the clinical findings and additional laboratory follow-up. Three diagnostic groups were created, with 57.6% of the biopsies belonging to group 1 (pathologic diagnosis in accordance with the final diagnosis), 11.7% of the biopsies belonging to group 2 (pathologic diagnosis in accordance with the final diagnosis but other diagnoses remained possible), and 22.5% of the biopsies belonging to group 3 (pathologic diagnosis in disagreement with the final diagnosis). Histopathology was inconclusive in 1.7% of cases; in 6.3% of cases, no clinical diagnosis could be rendered. Specific diagnoses included psoriasis in 33.3%, atopic dermatitis in 25.2%, immunodeficiency in 22.25%, Netherton syndrome in 16.2%, and ichthyosis in 12.6% of cases. Some cases had ≥2 diagnoses.

**Conclusions:** A skin biopsy may lead to a final diagnosis in nearly 70% of cases of neonatal and infantile erythroderma.

**Reviewer's Comments:** This timely review demonstrates the utility of a skin biopsy to aid in the diagnosis and differentiation of neonatal and infantile erythrodermas. This is a follow-up to a previous paper published by these authors examining the clinical and biologic presentations of neonatal erythrodermas. The authors meticulously document their histopathologic findings, but I was still surprised that a specific diagnosis could be rendered in nearly 70% of cases. My histopathologic experience with erythrodermas of the adult is at a much lower level of specificity, in agreement with the literature suggesting a specific diagnosis can be reached in only <55% of adult erythroderma cases. This paper also highlights the utility of the LEKTI antibody, a monoclonal antibody directed against the serine protease inhibitor; the staining is absent in Netherton's syndrome. A decision tree highlighting the use of 3 histopathologic patterns and the addition of the LEKTI antibody is a highlight of this paper, and I am eager to put this to use in my clinical practice. (Reviewer-Paul K. Shitabata, MD).

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Keywords: Erythroderma, Dermatopathology, Biopsy, Neonatal & Infantile

Print Tag: Refer to original journal article
Papular Mycosis Fungoides -- an Uncommon Clinical Presentation

Papular Mycosis Fungoides: Two New Cases of a Recently Described Clinicopathological Variant of Early Mycosis Fungoides.
Martorell-Calatayud A, Botella-Estrada R, et al:

J Cutan Pathol 2010; 37 (): 330-335

Papular mycosis fungoides should be recognized as a new variant of mycosis fungoides with a good prognosis and response to treatment.

Background: Mycosis fungoides is a cutaneous T-cell lymphoma that has well-recognized clinical presentations. Recently, a rare clinical presentation of a papular variant has been reported.

Objective: To report 2 new cases of papular mycosis fungoides with a review of the literature.

Design: Retrospective review and case report.

Participants: 2 female patients (aged 50 and 55 years).

Methods: Light microscopic examination and immunohistochemical studies were performed. Case Reports:
Patient 1 presented with a papulosquamous eruption on her trunk. Patient 2 presented with lesions on her trunk, buttocks, and feet. Neither patient had a history of mycosis fungoides. Both biopsies demonstrated the typical features of patch stage mycosis fungoides with atypical intraepidermal lymphocytes. Immunohistochemistry for the atypical lymphocytes was positive for CD4 and negative for CD30 and CD8.

PCR showed a monoclonal infiltrate in patient 1 and a polyclonal infiltrate in patient 2. High-potency topical corticosteroids in patient 1 led to resolution of all lesions by the fourth month and to a disease-free state at 15 months. Relapse after withdrawal of topical steroids was controlled with re-application of topical steroids. Patient 2 was treated with PUVA treatment for 5 months, leading to complete resolution and a disease-free state at 20 months.

Conclusions: Papular mycosis fungoides should be recognized as a new variant of mycosis fungoides with a good prognosis and response to treatment.

Reviewer’s Comments: The clinical presentations of mycosis fungoides continue to expand. Many of these variants mimic benign inflammatory dermatoses, and this papular variant is no exception. Because of these diagnostic subtleties, many investigators contend that a final diagnosis of mycosis fungoides must be made only when the clinical, histopathology, and additional molecular studies are in agreement. In this case, the histopathology and molecular studies in one case support the diagnosis. However, a monoclonal infiltrate by PCR does not unequivocally establish a diagnosis of a lymphoma and has been identified in reactive inflammatory dermatoses. The authors present a concise summary of histopathologic mimics such as pityriasis lichenoides chronica, pityriasis lichenoides et varioliformis acuta, and lymphomatoid papulosis. To this group, I would add a lymphomatoid drug eruption that may also show monoclonal T-cell infiltrates. Because of the relatively good prognosis for this variant of mycosis fungoides, it is important to rule out any history or clinical stigmata of mycosis fungoides. (Reviewer-Paul K. Shitabata, MD).

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Keywords: Mycosis Fungoides, Papular, Histopathology

Print Tag: Refer to original journal article
Approximately two thirds of patients treated with EGFR inhibitors develop skin reactions.

**Design/Objective:** In this randomized study, the authors compared the incidence and severity of cutaneous adverse effects in patients with unresectable metastatic colorectal cancer treated with chemotherapy plus panitumumab 6.0 to 9.0 mg/kg every 2 weeks.

**Participants/Methods:** 48 patients received prophylactic skin treatment starting 1 day before therapy and continuing through weeks 1 to 6. The treatment involved the face, neck, chest, back, hands, and feet. This treatment consisted of skin moisturizer twice a day, sunscreen SPF ≥15 before going outdoors, 1% hydrocortisone cream at night, and doxycycline 100 mg orally twice a day. The control group consisted of 47 patients who received similar treatment only after developing skin lesions. All patients were followed up weekly for 7 weeks to confirm compliance and monitor for any of the following: exfoliative dermatitis, paronychia or other nail disorders, acneiform dermatitis, desquamation, skin fissures, skin ulcers, lacerations, pruritus or pruritic rash, and skin infection.

**Results:** The incidence and severity of skin reactions was less in the prophylactic treatment group (29%) than in the reactive treatment group (62%). The median time to first occurrence of significant (grade 2) skin toxicity was not reached in the prophylactic treatment group, and was 2.1 weeks in the reactive treatment group. The most common skin lesions in both groups were acneiform dermatitis (77% vs 85%), pustular rash (27% vs 40%), and paronychia (17% vs 36%).

**Reviewer's Comments:** EGFR inhibitors are very attractive because of their almost non-existent hematologic toxicity. Unfortunately, these agents frequently cause gastrointestinal and cutaneous reactions. Interestingly, in most studies, a positive correlation between skin rash and clinical outcomes has been demonstrated. Skin reactions are seen in approximately two thirds of patients treated with these agents. Fortunately, most skin reactions tend to be mild to moderate. Severe skin reactions are rare but lead to poor quality of life, increased risk of super-infection, and dose reduction or even drug discontinuation. The paper is interesting and important. It demonstrates a positive effect of prophylactic treatment to reduce the incidence and severity of cutaneous toxicity during treatment with EGFR inhibitors. The treatment proposed by the authors is simple and feasible and includes regular moisturization, mild topical steroids at night, sunblock during the day, and doxycycline 100 mg orally twice a day. (Reviewer-Carlos Garcia, MD).

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**Keywords:** EGFR Inhibitors, Associated Skin Toxicity

**Print Tag:** Refer to original journal article
Skin Diseases in Kidney Transplant Patients Common, Should Be Treated Early

Cutaneous side effects of immunosuppressive drugs are documented in >50% of kidney transplant patients.

Objective: To describe the incidence of skin diseases and the time to presentation after kidney transplant.
Participants: Cohort of 1768 kidney transplant patients followed during 13 years at a single institution in the Netherlands.
Methods: Skin diseases were categorized as skin tumors (benign, premalignant, and malignant) and disorders other than tumors (infections, inflammatory, vascular, ulcers, and others).
Results: Altogether, 801 patients (45.3%) developed 2408 skin lesions. There were 1274 tumors and 1134 non-tumoral disorders. Skin tumors were diagnosed approximately 10 years later than the other skin diseases (14 vs 5 years, respectively). Of the registered tumors, 44.0% were benign, 21.6% were pre-malignant actinic keratoses, and 34.4% were malignant. More than half of the malignant tumors were squamous cell carcinomas (SCCs) and a third were basal cell carcinomas (BCCs). The latter appeared approximately 3.5 years earlier. The most frequent non-tumoral disorders were infections (viral, bacterial, and fungal), dermatitis, acne, and drug rashes. The most frequent skin infection was human papillomavirus (HPV)-related warts. Viral infections (particularly herpes simplex and herpes zoster) and Candida yeast infections tended to occur within the first 2 years after transplantation; while bacterial (folliculitis, erysipelas) and fungal infections were more common 6 years post-transplant.
Conclusions: This study gives a systematic overview of the high burden of skin diseases in organ transplant recipients. The relative distributions of skin diseases importantly changed with time after transplantation, with SCC contributing most to the increasing burden of skin diseases with increasing time after transplantation.
Reviewer's Comments: The authors provide not only the incidence but also a time frame for development of various skin lesions in renal transplant recipients. According to their results, infections and inflammatory conditions account for >50% of lesions during the first 3 to 4 years after transplant. Actinic keratoses and skin cancers tend to rise from 3% to 4% early to 20% to 45% with increasing time after transplantation. The incidence of benign tumors is stable over time and ranges from 20% to 30%. It's interesting that the incidence of drug rashes in this study was low. In other studies, cutaneous side effects of immunosuppressive drugs are documented in >50% of patients. In my kidney transplant patients, drug-related manifestations are common and include acneiform eruptions, gingival hypertrophy, hypertrichosis, and plantar hyperkeratosis. In terms of skin cancer, the role of HPV cannot be overemphasized. Many HPV types have been detected in benign, premalignant, and malignant skin lesions of organ transplant recipients. Actually, it is not rare to find multiple HPV types present in single skin biopsies. The incidence of viral warts rises steadily after transplantation and a strong association exists between the number of HPV-induced warts and the development of SCCs. It is thought that the hair follicle serves as a reservoir for HPV and that the E6 protein of various HPVs inhibits apoptosis in response to UV light-induced damage, therefore promoting the development of actinic keratoses and SCCs. (Reviewer-Carlos Garcia, MD).

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Keywords: Kidney Transplant Recipients, Skin Diseases

Print Tag: Refer to original journal article
Newer forms of skin GvHD include a lupus-like presentation with lichenoid histology and an eczematous variant with significant palmo-plantar keratoderma.

**Discussion:** Acute graft-versus-host disease (aGvHD) develops in 20% to 50% of patients receiving stem cells from human leukocyte antigen (HLA)-identical siblings and in up to 80% when there is HLA-mismatch. The most frequent manifestation is a maculopapular rash. The liver is the second most affected organ. Third in frequency is gastrointestinal involvement, which usually presents with abdominal pain, diarrhea, nausea, and vomiting. Histology is only marginally useful and the role of human herpes virus-6 in aGvHD is controversial. Chronic GvHD (cGvHD) occurs in 60% to 80% of patients and 90% of those will have skin involvement. Lichenoid GvHD usually occurs before the first year post-transplant. The skin lesions are clinically and histologically similar to lichen planus. Sclerodermatous GvHD presents later and usually after day 500 post-transplant. Lesions include lichen sclerosus, morphea, diffuse sclerosis, panniculitis, and even fasciitis. Skin biopsy shows varying degrees and depths of sclerosis. There is a hyperacute GvHD that occurs immediately after transplant, usually in patients with no immunosuppressive treatment or after non-HLA-identical transplants. Late aGvHD is the appearance of aGvHD changes >100 days after transplant. It's usually a consequence of reduction in the immunosuppressive treatment. Also, there is an eczematous GvHD with severe pruritus, palmo-plantar keratoderma, and no history of atopic dermatitis. Additionally, there is a lupus-like presentation with malar rash and lichenoid histology.

**Reviewer’s Comments:** As we saw in this paper, it is possible to document lichenoid histology early and aGvHD changes late in the course of the disease. Also, approximately 30% of cGvHD cases develop without previous history of aGvHD, and 30% of patients with aGvHD will never develop cGvHD. Another important point is that newer forms of skin GvHD must be kept in mind, including a lupus-like presentation with lichenoid histology, and an eczematous variant with significant palmo-plantar keratoderma. Regarding the sclerodermatosus variant of cGvHD, it’s important to remember that it includes a great variety of skin lesions such as lichen sclerosus, morphea, and diffuse sclerosis. The histology of lesions will reflect the clinical presentation showing various levels of sclerosis ranging from superficial dermis to fascia. Lastly, I’d like to emphasize that the role of skin biopsy in the diagnosis of acute GvHD is still controversial. A decision analysis published elsewhere showed that it is good practice to treat aGvHD without histologic confirmation when the prevalence of the disease is expected to be at least 30% as is the case for most patients undergoing stem cell transplantation. (Reviewer-Carlos Garcia, MD).

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**Keywords:** Graft-versus-Host Disease, Stem Cell Transplantation

**Print Tag:** Refer to original journal article
Histopathologic misdiagnosis is more common for melanomas that have been assessed with punch and shave biopsy than with excisional biopsy.

**Background:** Excisional biopsies have been advocated for lesions suspicious for malignant melanomas in the past, yet a significant number of lesions with this diagnosis in the differential are still submitted as shave biopsies and punch biopsies.

**Objective:** To report the false-negative misdiagnosis, adverse outcomes, false-positive misdiagnosis, and microstaging accuracy rates associated with shave and punch biopsies that are later completely excised.

**Design:** Prospective case series.

**Methods:** Other factors considered were anatomic site, physician type at initial management, hypomelanosis, melanoma subtype, biopsy sample size, multiple biopsies, and tumor thickness.

**Results:** Increased chances of histologic misdiagnosis were associated with punch biopsy (OR, 16.6) and shave biopsy (OR, 2.6) compared with excisional biopsy. Punch biopsy was worse than shave biopsy for odds of histologic misdiagnosis. Punch biopsy (OR, 5.1) and shave biopsy (OR, 2.3) had increased odds of microstaging inaccuracy over excisional biopsy.

**Conclusions:** Histologic misdiagnosis is more common with melanomas assessed with punch and shave biopsy than with excisional biopsy. Adverse events are more common with punch biopsies than with shave and excisional biopsy. The use of punch and shave biopsy also leads to increased microstaging inaccuracy. Worse outcomes were associated with biopsies performed by general practitioners (GPs). GPs performed an excisional biopsy in 84% of cases, while dermatologists performed an excisional biopsy in 67% of lesions.

**Reviewer's Comments:** The results of this study agree with those that have come before--it is better to completely remove any lesions in which the diagnosis of melanoma is a concern. This seems like a straightforward principle; unfortunately, life is more complicated than principles. Most lesions that I will shave have a low probability of being melanomas, and the extra time and morbidity hardly seem worthwhile for excisions. It was interesting that punch biopsies resulted in much higher error rates than shave biopsies, probably owing to a large amount of removed material than that present in a standard 4-mm punch. Will this study change the way I practice--shaving lesions of low malignant probability and excising lesions of high probability--probably not. I will, however, consider full excision for those lesions where I may have punched before. (Reviewer-Daniel Eisen, MD).

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Keywords: Melanoma, Shave Biopsy, Punch Biopsy, Excision

Print Tag: Refer to original journal article
Coal Tar treatment topically does not increase skin cancer risk.

**Background:** Coal tar has been utilized for decades in the treatment of psoriasis and eczema and is a clinically proven therapeutic agent. However, it does contain compounds with proven teratogenicity and carcinogenicity in animal studies, and the increased risk of skin cancer in patients who have undergone coal tar treatment is not well quantified. In addition, phototherapy is frequently utilized as a treatment option as well in patients with psoriasis and eczema, making it more difficult to properly assess the risk of skin cancer development directly attributable to coal tar therapy.

**Objective:** To determine the risk of cancer after coal tar in dermatological practice.

**Design/Participants:** Retrospective cohort study of 13,200 patients with eczema (one third) and psoriasis (two thirds).

**Methods:** The authors reviewed information from medical files, questionnaires, and medical registries. Patients treated with coal tar were compared to patients treated with dermatocorticosteroids as a control.

**Results:** The median exposure to coal tar ointments was 6 months (range, 1 to 300 months). Approximately 61% of the cohort was treated with coal tar, 60% with LCD (liquor carbonis detergens), and 40% with pix lithantracis. Over 60% of patients with psoriasis were considered to have severe psoriasis, with >10% total body surface area affected. Systemic therapies were utilized in 25% and phototherapy in 46% of these patients. Less than 50% of the eczema patients in the cohort were considered to have severe disease. The median duration of follow-up was 21 years, with 1327 tumors diagnosed.

**Conclusions:** There is no increased risk of skin cancer and non-skin cancer after coal tar therapy.

**Reviewer's Comments:** Coal tar therapy is a relatively inexpensive medication that can be compounded in topical steroids and has been utilized for decades for the treatment of eczema and psoriasis. This long-term retrospective study reaffirms that it is generally safe to use in patients for eczema and psoriasis, and can also be utilized in conjunction with phototherapy and other treatment modalities. (Reviewer-Amy Cheng, MD).

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Keywords: Coal Tar Treatment, Psoriasis/Eczema

Print Tag: Refer to original journal article
Background: *Staphylococcus aureus* infection is not uncommon in patients admitted to the hospital, and can contribute to the morbidity and mortality of patients in surgical and nonsurgical settings.

Objective: To determine the number of patients admitted to the surgical and internal medicine services who were *S. aureus* carriers and whether treatment of nasal carriers led to a decreased risk of *S. aureus* infections.

Design/Methods: This was a randomized double-blind placebo-controlled clinical trial conducted at 5 hospitals in the Netherlands from October 2005 through June 2007. Patients admitted to the departments of surgery and internal medicine were screened for nasal carriage of *S. aureus*. The authors looked for a cumulative incidence of hospital-associated *S. aureus* infections, and also measured in-hospital mortality, duration of hospitalization, and time of onset from admission to infection with *S. aureus*. The patients were randomly assigned to active treatment with mupirocin ointment with chlorhexidine or placebo ointment with placebo soap and treated for 5 days.

Results: 6496 patients were screened for *S. aureus*, and *S. aureus* carriage was identified in 1251 patients. In total, 917 patients with *S. aureus* underwent randomization, and the cumulative incidence of *S. aureus* infection was lower in the treated group (3.4% vs 7.7%). The number of patients who needed to be screened and the number of *S. aureus* carriers that would need to be treated to avoid 1 *S. aureus* infection was identified to be 250 and 23, respectively. There was no difference in the incidence of hospital-associated *S. aureus* infections between surgical and nonsurgical patients. There were 26 patients who died during their hospitalization, and 4 had a hospital-associated *S. aureus* infection. Three of these 4 patients were randomized to placebo and they were also surgical patients who underwent cardiothoracic surgery. One of the patients treated with mupirocin-chlorhexidine had a hospital-acquired *S. aureus* infection. None of the patients who received mupirocin-chlorhexidine and underwent cardiothoracic surgery died. The nonsurgical patients who died did not have their deaths attributed to *S. aureus* infection. There was no significant difference in mortality rates between the treated and nontreated group, but deep surgical site infection (SSI) was higher in the placebo group versus the treated group.

Conclusions: The number of surgical-site *S. aureus* infections acquired in the hospital can be reduced by rapid screening and decolonizing of nasal carriers of *S. aureus* on admission.

Reviewer's Comments: This is an interesting article that demonstrates a relatively high frequency of *S. aureus* nasal carriage in asymptomatic patients who were hospitalized and that decolonization of these patients actually has benefits in decreasing infection in surgical patients. It is difficult to extrapolate the results to the outpatient setting in dermatology patients. However, we usually have the opportunity to treat patients who suffer from recurrent *S. aureus* infection; therefore, incorporating a regimen to also reduce *S. aureus* carriage will have additional benefits beyond just the skin. (Reviewer-Amy Cheng, MD).

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Keywords: *S. aureus* Decolonization, Hospitalized Patients, Mupirocin, Chlorhexidine Soap

Print Tag: Refer to original journal article
Are Anti-TNF Biologics Effective for Dissecting Cellulitis?

3 Cases of Dissecting Cellulitis of the Scalp Treated With Adalimumab.

Navarini AA, Trüeb RM:

Arch Dermatol 2010; March 15 (): epub ahead of print

Adalimumab may be effective therapy for reducing scalp inflammation associated with dissecting cellulitis.

**Background:** Dissecting cellulitis, also known as dissecting folliculitis, is a scarring and sometimes disfiguring disease of the scalp. The process begins as occlusion of hair follicles causing an intense inflammation, which eventually results in fluctuant accesses that resolve with scarring and sinus tract formation. The disease most typically occurs in dark-haired male patients. It is sometimes associated with other diseases of the follicular occlusion tetrad that include acne, hidradenitis suppurativa, and pilonidal cysts. Although the disease has been reported to respond to isotretinoin, this drug is far less effective in dissecting cellulitis than in acne, and many patients do not respond adequately. The authors of this paper note that biologic tumor necrosis factor (TNF) inhibitors have shown modest efficacy for hidradenitis suppurativa that also results from follicular occlusion. However, only a single case report describes dissecting cellulitis responding to an anti-TNF monoclonal antibody.

**Objective:** To describe 3 patients with dissecting cellulitis who were treated with the anti-TNF monoclonal, adalimumab.

**Methods:** The authors identified 3 male patients diagnosed with dissecting cellulitis. All 3 patients had previously been treated with antibiotics and 2 of the 3 patients were treated with isotretinoin without success. At the time of starting adalimumab, all 3 men presented with boggy fluctuant scalp nodules and a scalp biopsy consistent with dissecting cellulitis. Cultures grew coagulase-negative Staphylococci in all 3 participants.

**Results:** Clinical signs of inflammation improved by 4 weeks and were absent by 3 months in all 3 patients. The patient's subjective rating of their disease severity all improved by 90 days. Histopathology showed reduction in the inflammatory cells after treatment, but, as expected, scarring and sinus tracts persisted. When adalimumab was discontinued in 1 patient, his disease relapsed 4 weeks later.

**Conclusions:** Adalimumab may be effective therapy for reducing scalp inflammation associated with dissecting cellulitis.

**Reviewer's Comments:** This case series suggests that adalimumab may be effective for dissecting cellulitis. Although the authors do not use a standardized scale to measure disease severity, the before and after photos included in the manuscript show impressive clinical improvement. Since dissecting cellulitis is often resistant to conventional treatments, one potential treatment strategy would be to begin a TNF inhibitor early in the disease process to prevent formation of sinus tracts associated with progression of this disease. (Reviewer: Michael S. Kolodney, MD, PhD).

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Keywords: Dissecting Cellulitis, Follicular Occlusion

Print Tag: Refer to original journal article
Positive nonsentinel lymph node metastases from melanoma are significant predictors of overall and distant disease-free survival.

**Objective:** To determine the prognostic significance of nonsentinel lymph node (NSLN) metastases from cutaneous melanoma for overall and distant disease-free survival.

**Design:** Retrospective single-institution study.

**Participants:** Patients with melanoma who had sentinel lymph node (SLN) metastases and underwent a completion lymph node dissection. Distant disease-free survival time was determined as the time from surgical treatment. SLNs were evaluated with serial sectioning and immunohistochemistry. NSLNs were evaluated with routine H&E staining. The prognostic significance of NSLN metastases was determined using univariate and multivariate analyses.

**Results:** The authors identified 419 patients with SLN metastases who underwent completion lymph node dissection. At least 1 positive NSLN was identified in 71 patients (17%). Median follow-up was 37 months. Overall survival and distant disease-free survival were significantly worse for patients with NSLN metastases as compared with those without NSLN metastases. However, the median number of total involved lymph nodes was 1 for the NSLN-negative group and was 3 for the NSLN-positive group. Among patients with either 2 or 3 positive lymph nodes, the NSLN-positive group had a significantly worse survival rate. On multivariate analysis, patient age, tumor depth, extracapsular extension, and positive NSLNs were significantly associated with overall survival. Independent predictors of distant disease-free survival included age, mitotic rate, angiolymphatic invasion, >3 positive lymph nodes, and positive NSLNs.

**Conclusions:** The NSLN status is predictive of overall and distant disease-free survival in patients with SLN metastases from melanoma.

**Reviewer's Comments:** Although NSLN status was predictive of survival, even when the number of positive lymph nodes was considered, the mechanism of such an observation is not clear. If confirmed by other studies, this finding would suggest that the prognosis of patients with melanoma is influenced by which lymph nodes harbor metastases. (Reviewer-Todd M. Tuttle, MD).

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**Keywords:** Nonsentinel Lymph Node Metastases, Survival

**Print Tag:** Refer to original journal article