Focus on Latin America

As a truly global organization, the International Psoriasis Council (IPC) interacts with healthcare professionals dedicated to the management of psoriasis in different regions of the world. In this and upcoming issues of the IPC Psoriasis Review we deliver a focus on select regions throughout the world with a view to sharing insights, appreciation and learning.

At its 2009 Psoriasis Symposia held in Dallas, Texas, October 30-31, IPC hosted 26 representatives from nine countries across Latin America. For the first time, the psoriasis community was able to generate a point estimate of the prevalence rates for psoriasis and psoriatic arthritis in this diverse and large region (See Table 1). While not statistically robust, the data nevertheless demonstrate that the country-specific prevalence rates compare well within the region as well as to current estimates in the U.S.A. and Europe. Moreover, in this issue we are pleased to provide perspectives on the management of psoriasis in Brazil (Prof. Jesus Santamaria); Mexico (Dr. Nancy Podoswa) and Paraguay (Dr. Roxanna Maciel). IPC sincerely thanks these colleagues for their contributions.

Table 1. Estimated Psoriatic Disease Prevalence Rates in Latin America

<table>
<thead>
<tr>
<th>Country</th>
<th>Psoriasis Prevalence (%)</th>
<th>PsA Prevalence (% of PsO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>1.13 (0.18)</td>
<td>18, GAEP registry</td>
</tr>
<tr>
<td>Brazil</td>
<td>2.5 (0.71)</td>
<td>15 (7.07)</td>
</tr>
<tr>
<td>Chile</td>
<td>2</td>
<td>13.5 (2.12)</td>
</tr>
<tr>
<td>Colombia</td>
<td>2</td>
<td>15.42 (7.14)</td>
</tr>
<tr>
<td>Ecuador</td>
<td>2.75 (3.18)</td>
<td>10</td>
</tr>
<tr>
<td>Mexico</td>
<td>2.9 (1.24)</td>
<td>13.8 (10.96)</td>
</tr>
<tr>
<td>Paraguay</td>
<td>1</td>
<td>30</td>
</tr>
<tr>
<td>Peru</td>
<td>2.5 (0.71)</td>
<td>10</td>
</tr>
<tr>
<td>Venezuela</td>
<td>2.5 (1.32)</td>
<td>11.5 (3.77)</td>
</tr>
<tr>
<td>Regional Average (26)</td>
<td>2.14 (0.92)</td>
<td>15.25 (3.88)</td>
</tr>
</tbody>
</table>

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Dear Colleagues,

On behalf of the International Psoriasis Council and this issue’s coeditors, Professors Gail Todd and Sergio Chimenti, I am delighted to introduce the December 2009 edition of our *IPC Psoriasis Review*. In view of the fact that it is year-end, it is productive to take stock of the contributions that IPC has made to the Psoriasis community over the past year. In 2009, IPC planned and enacted an ambitious agenda of psoriasis-focused programs to advance psoriasis education, research, and treatment around the world. This agenda has included large educational symposia with participants from across the globe; high-level round-table discussions with key opinion leaders that typically have resulted in peer-reviewed publications; and a pilot program to reach out to the future leaders in psoriasis.

In this issue, IPC is proud to review the efforts in each of these areas. First, we present a focus on the management of psoriasis in Latin America that derives from our outreach efforts to the global psoriasis community. Indeed, we expect to continue this “Focus” series in future issues to highlight the unique approaches and challenges to managing psoriasis in diverse populations around the world. I am proud that IPC is realizing its objectives of generating a true global psoriasis community. Indeed, IPC was delighted to play a role in the formation of SOLAPSO, Sociedad Latinoamericana de Psoriasis. Personally, I had the distinct pleasure of spending a day with the society in Rio de Janeiro recently in order to help draft the first guidelines of care for Psoriasis in Latin America. I was also humbled to receive the first honorary membership to their Society.

Second, we spotlight an IPC program that began as a pilot initiative in 2009 but which we hope will expand into a broader program internationally in the coming years. The program called “Future Leaders” is designed to address the paucity of residents that are currently pursuing investigative dermatology by creating opportunities for mentorship, research and interaction with IPC members that will stimulate a desire and passion for residents to pursue investigative clinical and therapeutic aspects of psoriasis as a career. Indeed, if you as IPC members or affiliated colleagues are willing to participate in this program please send us an email at info@psoriasiscouncil.org.

Third, we present select cases from our October 8, 2009, EADV IPC Meet the Experts Program chaired by Professor Wolfram Sterry, and held in Berlin, Germany.

In 2009, we embraced nine new additions to the IPC community. These included new Councilors; Hervé Bachelez, M.D., Ph.D., Paris, France; Ian Bruce, MB, BCh, BAO, M.D., FRCP, Manchester, U.K.; and Errol Prems, M.D., Ph.D., Rotterdam, The Netherlands. We also welcomed the following new members: Edgardo Chouela, M.D., Ph.D., Buenos Aires, Argentina; Ricardo Romiti, M.D., Ph.D., São Paulo, Brazil; Lars Iversen, M.D., DMSc, Aarhus, Denmark; Arnon Cohen, M.D., Ph.D., M.P.H., Tel-Aviv, Israel; Ruth Murphy, BSc., M.B., MRCP, Nottingham, UK; and Murlidhar Rajagopalan, M.D., M.B.B.S., Chennai, India. We look forward to long and productive interactions and thank them for their contributions to date.

Through its global forum at www.psoriasiscouncil.org, IPC continues to provide opportunities for professional collaboration to expand its reach and add to its global database. Our goal is to continuously enhance the services and programs that we deliver to those medical professionals involved in the management of psoriasis around the world.

Finally, I would like to announce the retirement of Ms. Malia Tee from the IPC board. Malia was a founding member of the organization and was influential in translating the vision for IPC into the reality that it has become today. Consequently, I sincerely thank Malia for her devoted service through the years and wish her the best in her new ventures.

We hope this newsletter is informative and that the knowledge, experience and insights of our faculty are valuable to you in evaluating and treating your psoriasis patients. We thank all of you who have contributed as well as our sponsors, without whom all our various activities and publishing would be impossible. We wish you all a very happy new year.

For additional copies of *IPC Psoriasis Review*, or to learn more about IPC, please visit www.psoriasiscouncil.org.

Sincerely,

Alan Menter, M.D., President
International Psoriasis Council

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**In memoriam**

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Dr. Murlidhar Rajagopalan, India
Professor Jörg Prinz, Germany
Dr. David M. Pariser, United States
Professor Carlos Ferrandiz, Spain
Dr. Kenneth Gordon, United States
Dr. Lars Iversen, Denmark
Dr. Seija-Liisa Karvonen, Finland**
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* IPC has chosen to honor these members with the title of “councilor” to acknowledge their special contributions to psoriasis.

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Dr. Bruce Strober, United States

** In memoriam**
With a view to providing scientific input related to the treatment of psoriasis, the Brazilian Society of Dermatology within the project of preparing guidelines for the main therapeutic dermatoses assembled a group of 22 dermatologists. These were experts in the area, who under the coordination of Dr. Maria Denise Fonseca Takahashi developed the first Brazilian Consensus of Dermatology in 2006 and updated it this year. It was distributed to all departments and accredited members of the Society.

The guidelines were divided into 15 chapters in the following categories; epidemiology, etiology, immunopathology, genetics, clinical manifestation, diagnosis and treatment. Faced with mounting evidence, the co-morbidities in patients with psoriasis were also highlighted.

In the algorithm of treatment of moderate to systemic psoriasis, the consensus suggests starting phototherapy or methotrexate. If no response or if there is intolerance then acitretin is recommended. In cases where there is no indication, lack of response or adverse effects of previous treatments, then cyclosporine or biological agents are indicated. Additionally, following the trend of the AAD recommendations, the cumulative dose of 3.5 to 4 g methotrexate has been established as a guide to indicate liver biopsy.

Topical medications (corticosteroids) and traditional systemic drugs (methotrexate, cyclosporine, and acitretin) are provided by the public health system, free of charge to patients unable to acquire them.

Phototherapy and biological agents are not yet in the protocol in the public health system. In some cities and states, there is coverage by the public and complementary system of health. However, there are still a good number of patients who only get the medication through the judicial system.

The group of experts recommended that health authorities ensure that psoriasis patients have access to all available treatments and moreover, the decision of which treatment is best for a particular patient should be the prerogative of the physician.

The approach to the study and treatment of psoriasis in Mexico is faced with different challenges and problems. There are very few and small epidemiological studies that have dealt with the disease so we don’t have a clear knowledge about the real magnitude of the problem. We don’t have figures; we don’t know the percentage of severe cases and the impact on quality of life that the disease is imposing on the patients. Based on these small studies, most of the dermatologists agree that approximately two percent of the population in Mexico is affected by the disease which means that at least two million Mexicans have psoriasis. This actual figure might be far away from the real numbers due to the fact that a large percentage of population in Mexico lack medical services and from the fact that the disease may be under or misdiagnosed.

None the less, almost all specialists agree that psoriasis is one of the most frequent problems in dermatological practice and that it is one of the 10 most frequent dermatological illnesses. In some institutions psoriasis is the fifth
most frequent dermatological diagnoses surpassed only by illnesses such as acne, verruca vulgaris, atopic dermatitis and some benign tumors of the skin.

On the other hand, in my opinion, one of the principal problems in dealing with psoriasis is the substantial lack of knowledge of the disease, which is observed not only among patients but also, unfortunately, among medical professionals. Mexico is a developing country where the practice of folk medicine is still strong. A large percentage of patients don’t have a clue about their disease. Often they are desperate and rely on a great number of bizarre treatments which make them subject to quacks and fraudulent practices. This results not only in personal economic losses but delayed diagnoses and medical attention in addition to possible medical complications created by these practices.

Of consideration is the fact that even though psoriasis is considered a paradigm illness in the field of dermatology and its study is mandatory in medical school and in different residency programs such as internal medicine, family medicine and of course dermatology, the limited knowledge of and lack of interest in the disease among medical colleagues is notorious. For most non-dermatological doctors and health authorities, psoriasis is a non-lethal illness of limited importance, with its primary impact being psychological and thus not needing sophisticated treatment. This makes it difficult to obtain resources for the teaching, study and treatment of the disease.

Finally, we cannot omit pointing out the increasing disinterest among dermatologists in cutaneous diseases. There is a clear tendency on the part of dermatologists to involve themselves more in the cosmetic field of the specialty, leaving aside the intense study and treatment of cutaneous diseases. In this context, we have noticed that a substantial percentage of patients with severe forms of psoriasis are not receiving appropriate treatment. The majority continues being treated with topical prescriptions and a certain resistance exists on the part of dermatologists, whether due to lack of knowledge or experience, to use systemic treatment for moderate or severe forms of the disease. These observations are consistent with data obtained from other countries such as the surveys conducted by the National Psoriasis Foundation in the United States.

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**PARAGUAY**

**Roxana Maciel, M.D., Maciel Stetica Medica S.R.L., Paraguay**

Paraguay is a landlocked country, surrounded by Argentina, Brazil and Bolivia, located in the heart of South America. It is a continental country that lies 800 kilometers (497.1 miles) from the Pacific Ocean and 600 kilometers (372.8 miles) from the Atlantic Ocean. The total population of Paraguay is 6,831,306 inhabitants with a density of 14.63 per square kilometer. The population, mostly concentrated in the eastern area of the country, is 60.4% urban. The most crowded city is the capital of Paraguay, Asuncion with 515,662 inhabitants. The ethnicity is primarily mestizo (mixed Spanish and Amerindian) which constitutes 95% of the population.

**HOSPITAL PRACTICE**

The Social Welfare Institute (IPS) has several hospitals, peripheral clinics and health posts distributed throughout the country to serve its 1,000,000 policyholders. The coverage offered by the IPS covers all formal sector workers in the country, personnel of decentralized State agencies, joint ventures, teachers of public and private sectors, including domestic service and veterans of the Chaco War.

One of the virtues of this system is that its benefits are extended to spouses or partners, children and parents of the insured in a situation of dependency.
The assistance provided includes: consultation, laboratory studies, pathology, radiology, hospitalization, surgery, dialysis, transplantation and supply of drugs based on an existing list.

The medical specialties served in the field offices: allergy and immunology, cardiology, pediatric cardiology, cardiac surgery, general surgery, pediatric surgery, peripheral vascular surgery, clinical medicine, infectious diseases, dermatology, pediatric dermatology, endocrinology, pediatric endocrinology, gynecology, gastroenterology, hematology, pneumology, child pneumology, obstetrics ophthalmology, pediatric ophthalmology, oncology, otolaryngology, psychology, pediatrics, proctology, pediatric rheumatology, rheumatology, orthopedics and urology.

The dermatology service has six dermatologists including a pediatric dermatologist and also four residents. From January 1 to October 30, 2009, a total of 510,457 patients have been treated in the IPS clinics. The number of cases handled by dermatologists in the same period was 15,777 patients, with 313 diagnosed as Psoriasis. None of the patients were from indigenous races. Importantly, some patients do come in once a month to receive their drugs.

Since the climate in Paraguay is generally quite sunny, this is exploited by dermatologists to prescribe “Heliotherapy” (controlled exposure to the sun). Thus, during the months of January and February the number of patients diagnosed with psoriasis trend lower than in other months, which can be attributed to the high temperatures which average 32°C to 34°C.

The numbers of consultations by dermatologists to patients of the Central Hospital in Asuncion were 442, of which eight presented with the diagnosis of psoriasis. In one ongoing research study of 50 patients with psoriasis, the majority were found to have an increased abdominal circumference, impaired glucose homeostasis, abnormal levels of triglycerides and a diagnosis of hypertension, supporting the comorbid association of psoriasis with various cardiovascular related sequelae.

Among the drugs that the IPS provides to its policyholders, for the oral treatment of psoriasis are: cyclosporine and methotrexate; and for topical treatment: clobetasol and six percent salicylic acid in vaseline. In dermatology we have no biological medicines, but in the Rheumatology Service they use adalimumab to treat 40 patients per year of which three have a diagnosis of psoriatic arthritis.

A disease prevention initiative called ASURIESGO was created to modify the lifestyle of psoriasis patients. Its goal is to control weight, blood pressure, cholesterol, triglycerides and glucose levels by frequent testing. The initiative invites patients to prevent disease through exercise, diet controls and education concerning prevention. The program is targeted at patients with psoriasis who have abnormal laboratory ranges.

PRIVATE PRACTICE

The most used for oral treatments are methotrexate and acitretin, which must be purchased with a prescription. On occasion, the patient sometimes will receive drug therapies from the drugstore in the absence of a prescription which makes follow up difficult to monitor.

Cyclosporine is an expensive drug which explains its limited use. Medications such as coal tar, licor carboniser detergents, tazarotene should be prepared in pharmacies of manipulation, since we do not have them readily prepared for sale. Others like pimecrolimus, tacrolimus, and calcipotriol can be purchased in neighboring countries. There is only a single center for treatment with ultraviolet light and this is provided in a dermatology center only for private patients.
Meet the Experts

Treating Difficult Psoriasis Cases

The most recent IPC Meet the Experts program was held October 8, 2009 in Berlin, Germany under the chairmanship of Wolfram Sterry. Four cases of difficult-to-treat psoriasis were presented to our panel of experts, Jonathan Barker (U.K.), Alan Menter (U.S.), and Peter van de Kerkhof (The Netherlands). Here, we summarize the key issues and discussion of these four cases.

CASE 1: 36-year-old pregnant female with pustular psoriasis flares.

**History and presentation:** This patient had a 15-year history of plaque psoriasis without psoriatic arthritis. She had previously had inadequate responses to standard systemic therapies, including methotrexate and cyclosporine, but had been well controlled on etanercept (25 mg BIW) for approximately two years. When she wanted to become pregnant, etanercept was stopped and cyclosporine therapy was initiated (150 mg twice daily) three months before conception. At gestational week 20, she had a flare (Figure 1A) with von Zumbush pustular inflammatory psoriasis (Figure 1B).

**What treatment options should now be considered?**

Alan would consider a tumor necrosis factor (TNF) blocker, especially since she had responded previously to etanercept, perhaps in combination with low-dose prednisone.

Peter thought that systemic therapy was warranted, although safer approaches would include phototherapy or topical treatments in patients with flares of this type and severity. In this case, TNF blockade with etanercept would be a choice.

**Clinical course:** The patient was treated with prednisolone in close consultation with her obstetrician. However, every attempt to taper prednisolone resulted in a flare similar to the one she experienced after stopping cyclosporine (Figure 1). Her symptoms were eventually stabilized with a short course of combination therapy with prednisolone, cyclosporine, and etanercept. Her pregnancy was complicated by preeclampsia and glucose intolerance but at 35 weeks she delivered a healthy baby boy via elective cesarean section. Her psoriasis resolved within a week of giving birth.

**Discussion points:** In pregnant patients, ~60% of psoriasis cases improve, 20% stay the same, and 20% get worse. Postpartum flares are significant in a large proportion of patients, with the additional issues of drug exposure via lactation. A series of fetal abnormalities termed VACTERL (Vertebrae/Anal/Cardiac/Trachea/Esophagus/Renal/Limb) have been noted in the field of rheumatology in babies born to mothers receiving TNF antagonists, although the incidence is rare. Severe psoriasis during pregnancy remains a challenge.

![Figure 1. A) Psoriasis flare with B) von Zumbush pustular inflammatory psoriasis.](image-url)
CASE 2: 66-year-old man with severe psoriatic arthritis experiences methotrexate-induced alveolitis.

History and presentation: This patient had a 30-year history of plaque psoriasis and a 20-year history of psoriatic arthritis, which had resulted in mutilation of fingers (Figure 2) and toes. Comorbidities included arterial hypertension, chronic renal failure, and hyperlipoproteinemia. In the three years prior to presentation, he had been treated with acitretin, leflunomide, methotrexate, NSAIDs, and a topical vitamin D derivative. He presented with erythematous scaly plaques covering most of his body and visible pustules consistent with acute exacerbation of skin symptoms. He reported intermittent pain in the joints of his fingers and toes.

The patient was treated with infliximab (5 mg/kg), which resulted in significant improvement and joint and skin symptoms after the second infusion and remission of all symptoms after the third infusion. Five months after the first infusion he reported onset of joint pain. His blood creatinine increased to 1.89 mg/dL; his treatment continued in consultation with his nephrologist and his dosing regimen was reduced to six-week intervals. Approximately two years later he had worsening of joint pain and tilidin plus naloxon (10 mg/day) was added to his infliximab regimen. Five months later he had severe worsening of joint pain and swelling of the ankle joints (Figure 3). Infliximab was discontinued and treatment with adalimumab (40 mg every other week following the loading dose) plus methotrexate (7.5 mg/week) was initiated. There was significant improvement in joint pain after two weeks and improvement in skin symptoms (84% PASI improvement) after three months of treatment.

After three months of combination therapy with adalimumab and methotrexate, the patient experienced acute and progressive respiratory insufficiency accompanied by a dry cough, with no fever. As symptoms worsened, the patient was transferred to the intensive care unit. Computed tomography showed no signs of pneumonic infiltration but enhanced signaling throughout the lung; bronchoscopy showed distinct lymphocytosis. Levels of C-reactive protein (CRP) were 23 mg/dL. A chest x-ray showing alveolitis is shown in Figure 4.

What is causing the alveolitis and respiratory symptoms?

There was no indication of infectious disease (viral, bacterial, or fungal) or autoimmune disease. Methotrexate is known to cause alveolitis.

Clinical course: Methotrexate and adalimumab were withdrawn and the patient was treated with systemic steroids (started at 100 mg/day and then tapered slowly). Clinical symptoms quickly regressed and CRP levels decreased to 0. Adalimumab was reintroduced (40 mg every other week after a loading dose). The patient has mild joint pain in his fingers and maintains a PASI score of 5.

Discussion points: Methotrexate-induced alveolitis is more common in patients with rheumatoid arthritis, but dermatologists also need to be aware of this possible adverse event. The risk of this event is not based on dosage or duration of methotrexate treatment. Baseline chest x-rays should be collected prior to initiating methotrexate. Patients should be advised to immediately report a dry, persistent cough. Methotrexate should not be used again in these patients.
CASE 3: 60-year-old obese male with psoriasis, psoriatic arthritis, and significant comorbidities who needs lifestyle counseling.

History and presentation: The patient had a 17-year history of psoriasis and two-year history of psoriatic arthritis. At presentation, 40% of his body surface area was affected by psoriasis, PASI score was 26, and he had generalized discoid plaques on the trunk (Figure 5A and 5B) and limbs and active scalp involvement (Figure 5C). He had received various topical therapies and phototherapy. Prior systemic therapies included methotrexate (five years at an average dose of 15 mg/week; liver biopsy after cumulative dose of 3450 mg showed stage II changes), acitretin (four years), 6-thioguanine (one year), alefacept (single 12-week course), and efalizumab (eight months). Comorbidities included severe obesity (BMI = 41), heart disease (pacemaker), insulin-dependent diabetes mellitus, chronic obstructive pulmonary disorder, asthma, vision loss, and depression. He was taking 12 prescription medications for comorbidities in addition to his drugs for psoriasis and psoriatic arthritis.

What is the best course of treatment for this patient?

Infliximab was suggested as a possible therapeutic option because the dosage can be adjusted according to the patient’s weight.

Clinical course: Infliximab was initiated at an initial dose of 5 mg/8 weeks after three conditioning doses at weeks 0, 2, and 6. His current dosing schedule is 8 mg/kg every six weeks. Methotrexate (15 mg/week) was reinitiated at the outset of infliximab therapy. At present, his skin is 90% clear with isolated papules only. There has been no exacerbation of his comorbidities. His quality of life is excellent; when his skin cleared his depression symptoms improved and he began to exercise.

Discussion points: In patients with cardiac complications, dermatologists work with cardiologists to select optimal medications. Based on emerging data, TNF blockers may improve cardiac function. Dermatologists should counsel their obese patients about weight management, as some systemic therapies for psoriasis may cause weight gain. Clearing the skin assisted this patient with making significant lifestyle changes.

CASE 4: 58-year-old female with significant comorbidities and recalcitrant psoriasis.

History and presentation: This patient had a 21-year history of plaque psoriasis with extensive involvement, frequent episodes of erythroderma, and hospitalization three to five times per year. Comorbidities included diabetes mellitus II, obesity, hypertension, dyslipidemia, liver fibrosis IIIb, and renal insufficiency. She was a smoker and used alcohol.

Prior therapies included topicals and phototherapy, systemic therapies (methotrexate and cyclosporine associated with liver fibrosis and kidney problems, respectively), fumarates, acitretin, and salazopyrine; all treatments were ineffective.

What is the most appropriate treatment option for this patient?

Jonathan suggested using a TNF blocker if there were no contraindications, or perhaps hydroxyurea in countries where the biologics are unavailable.
Clinical course: Infliximab therapy was attempted (5 mg/kg) at weeks 0, 2, 6, and 14. The patient also received simvastatin, insulin, and rosiglitazone. Infliximab was discontinued at week 14 for lack of efficacy. Subsequent treatments with mycophenolate mofetil, tacrolimus plus acitretin, and cyclosporine plus acitretin were not effective. Triple combination therapy with infliximab/cyclosporine/acitretin was attempted but the patient had an anaphylactoid response. The infliximab in the triple combination regimen was replaced with adalimumab; after a marked improvement during the first 12 weeks of this regimen, there was a total loss of efficacy and the patient was hospitalized with erythroderma. She had developed anti-adalimumab antibodies.

Treatment with ustekinumab, an antibody that blocks interleukin (IL)-12 and IL-23, was initiated in combination with acitretin (60 mg/day). Ustekinumab was administered at 45 mg in weeks 0, 4, and 16, and then maintained at 90 mg every eight weeks. Results before and after six months of ustekinumab therapy are shown (Figure 6).
Learning from the Experts: My Experience in the IPC Mentorship Program

Throughout my educational life, I have learned that paradoxically the more I learn about something, the more I discover I don’t know. This is particularly true regarding medicine. As we expand our knowledge beyond the anatomical structures and physiology toward genetics and immunosignalling, we simply uncover new questions. We strive to further define the mechanisms of disease. How can we modulate these processes?

With all of this in mind, I have found that I have learned the most, from mentors and attending physicians who have mastered the art of the question. I can only assume that they share this love for learning and with that comes more questions… During my experience working with Drs. Alan Menter and Craig Leonardi, I have had the opportunity to search for and find the answers to some fascinating questions in the field of psoriasis. The exposure to some particularly challenging cases alongside these two clinicians lead to some tough inquiries and the educational search for answers.

During my week in Dr. Leonardi’s clinic, we saw a patient with severe psoriasis who was previously well controlled with adalimumab before discovering she was pregnant. This brought about the question: Should a patient continue systemic or biologic therapy for psoriasis during pregnancy? While some medications like acitretin, methotrexate and PUVA are obviously contraindicated, cyclosporine and many of the biologic medications do not appear to directly cause significant adverse pregnancy outcomes and birth defects. With this information, the patient decided to discontinue the medication during her pregnancy. Fortunately, her psoriasis remained well controlled on topical medications only.

However, after the patient gave birth to a healthy baby, she began to experience a severe post-partum flare, as frequently happens post-partum. She strongly desired to return to adalimumab, but was also insistent on breast feeding her new baby. This lead us to consider a number of issues. Are the biologic medications secreted in breast milk? If so, can they be absorbed through the gastrointestinal tract of an infant? If so, what would be the implication on the baby’s immune system and vaccinations? So after searching through the literature, we found differing results for the three major anti-TNF alpha agents used to treat psoriasis. First, entanercept has the capability to cross the placenta, although it appears to have much lower concentrations in the fetus than in pregnant patients. Entanercept has been identified in breast milk, but it does not appear well absorbed across the infant’s gastrointestinal tract. This is logical since these large molecule medications are also poorly absorbed in adults, hence necessitating injection to administer. On the other hand, infliximab does not appear to transfer as readily across the placenta, with some increase in transfer during the third trimester. It is also not excreted during lactation. Unfortunately no information was available regarding adalimumab concentrations transplacentally or in breast milk. Armed with this knowledge, we were able to counsel the
patient that there are no studies evaluating adalimumab and lactation. We informed her that some biologic medications do appear to be excreted during lactation, but although highly unlikely, it would be impossible to know whether her baby would absorb any of the medication, as no commercial assay is available to detect it. We advised the patient not to undergo treatment with adalimumab while breast feeding, and to consider alternate feeding with bottle formula if indeed she restarted her adalimumab. If absorbed, the medication has a possible risk of infection and altered response to vaccination for the baby. What about other unknown factors such as the effect on myelination or other developmental processes? The answers are unknown.

I also had the wonderful opportunity to spend over a month in Dr. Menter’s clinic just prior to starting Dermatology residency. We saw multiple patients with psoriasis that was disabling, and I quickly realized that severe disease was not directly correlated with body surface area or the thickness of the plaques. We saw many patients with severe inverse psoriasis and palmoplantar disease. Often times, this may have only covered four or five percent of the patient’s body but directly compromised their ability to perform their job and their Quality of Life, especially their relationship with their friends and family. The real lesson came when I learned that it was often difficult to get these patients approved for systemic therapy and that they do not qualify for most clinical trials. The question of how can we quantify this disease severity and response to treatment in these patients arose. With close collaboration with orthopedic hand and foot specialists, we devised an assessment tool to quantify the disability that these patients have. Hopefully this will allow us to track their response to therapy, and ultimately to help devise clinical trials to assess this recalcitrant form of psoriasis subset’s treatment needs.

Some of the most rewarding experiences that I have had with the International Psoriasis Council have involved attending meetings with experts from around the world. In September of 2008, I had the privilege of attending a comorbidities meeting in Dallas, Texas. I had access to a room full of multidisciplinary international experts. After a day of presentations defining the problems, I was able to watch and participate as studies were designed to find answers. A specific example involves the known association of the metabolic syndrome and psoriasis. From our perspective as dermatologists, it is difficult to tell which comes first. The specialists at the meeting were able to design a pediatric registry that will track changes in BMI and health in children with psoriasis. I also attended an IPC meeting in Dallas at Baylor Hospital targeted for 30 Latin American dermatologists from nine different countries just a month ago. The group generated discussion regarding the prevalence of psoriasis, its metabolic associations particularly in Mexico, and the use of PUVA internationally. In depth discussion regarding the IL 12/23 pathway was generated as well as down stream targets such as IL17.

Finally, working with the physicians in the International Psoriasis Council, has not only been a wonderful educational experience, but it has provided me with long lasting mentorship and guidance that I am incredibly thankful to have.

References

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FACULTY DISCLOSURES

Professor Barker has served as a speaker or advisory board member for Schering-Plough, Wyeth, Abbott, Merck-Serono, Janssen-Cilag and Novartis.

Dr. Menter has served as a consultant, investigator, speaker or advisory board member for Abbott, Allergan, Amgen, Astellas, Asubio, Celgene, Centocor, Eli Lilly, Galderma, Genentech, Novartis, Novo Nordisk, Pfizer, Promius, Stiefel, Syntrix Biosystems, Warner Chilcott, and Wyeth.

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Professor Todd has been principal investigator for several applied research drug trials in South Africa. She has also consulted for Procter & Gamble and been on an advisory board for Schering-Plough. No personal payments have been received from any of these consultancies.

Professor Chimenti has served as a consultant, speaker and an advisory board member for Schering-Plough, Cellgene, Centocor, Genentech, Almirall, UCB, Wyeth, Pfizer, Abbott, Novartis, Janssen-Cilag and Leo Pharma.

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