Best of JAMA Dermatology 2018

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I have no conflicts of interest to disclose.

Introducing “Images in dermatology”

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Acrodermatitis Continua of Hallopeau

JAMA Dermatology
2018;154(11):1346
Additional educational highlights

Patient page

Clinical evidence synopsis

Clinical reviews

Highlights of 2018

Treatment

Patient care

Drug complications

Key issues

Highlights of 2018

Treatment
Topical sirolimus/rapamycin for facial angiofibromas in tuberous sclerosis complex

- **TREATMENT RCT**
  - Koenig M et al, 2018;154(7):773-780
  - Phase 2 RCT, n=179, 1% vs 0.1% vs vehicle
  - @ 6 months, 1% > largest improvement

- Sirolimus gel vs placebo RCT
  - Wataya-Kaneda M et al, 2018;154(7):781-788
  - Phase 3 RCT, n=62, 2% vs placebo
  - @ 3 months, 5(17%) markedly improved, 13(43%) improved in treatment group

Efficacy and safety of ozenoxacin cream for treatment of adult and pediatric patients with impetigo: a RCT (n=411)

- **Phase 3 study:** ozenoxacin 1% (BID) superior clinical success versus placebo @ day 5 (112 of 206 [54.4%] vs 78 of 206 [37.9%]; p = .001)
- Associated with microbiological success

Reference: Rosen T et al. JAMA Dermatology. 2018;154(7):806-813

Effectiveness of low doses of hyaluronidase to remove hyaluronic acid filler nodules: a RCT (n=9)

- **Split-arm, parallel-group RCT**
  - Hyaluronidase at low doses (1.5-9.0 U per 0.1 mL) was significantly more effective for dissolving HA nodules than saline at 4 weeks and 4 months.
  - MD rater, patient self-assessment
  - visual/palpation

- Dose response noted
Reference: Alam M et al. JAMA Dermatology. 2018;154(7):765-772
Effect of platelet-rich plasma injection for rejuvenation of photoaged facial skin: a RCT (n=27, age 18-70)

- Outcome: patient self-assessment
- 3cc intradermal injections of PRP to one cheek and sterile saline to contralateral cheek
- 6 months: texture (2.00 [SD 1.20] vs 1.21 [SD 0.54]; p=.02)
  wrinkles (1.74 [SD 0.99] vs 1.21 [SD 0.54]; p=.03)

- Pilot study: PRP may be effective for improvement of texture and wrinkles of photoaged skin

Reference: Alam M et al. JAMA Dermatology. 2018;154(12):1447-1452

Aprepitant for the treatment of pruritus in Sezary syndrome: a randomized crossover clinical trial (n=5)

- Dose: 125 mg[day 1], 80 mg[days 2-7]
- QOL: no difference
- Pruritus @ 7 days
  - placebo: no change over 7 days
  - treatment group: significant increase

Aprepitant treatment may not improve pruritus as reported in previous retrospective observational studies.


Highlights of 2018

Patient care
Risk of subsequent cutaneous melanoma in moderately dysplastic nevi excisionally biopsied but with + histologic margins (n = 467)

- Multicenter retrospective cohort study (9 centers)
- Development of melanoma at biopsy site or elsewhere
- No melanoma developed at biopsy site

- 22.8% developed melanoma at separate site
  + History of melanoma -> OR 11.74; 95% CI, 5.71-24.15; p<.001
  + 2 or more dysplastic nevi (1 moderate) -> increased risk of melanoma

Reference: Kim C et al. JAMA Dermatology. 2018;154(12):1401-1408

Prescribed exercise with compression versus compression alone in treating patients with venous leg ulcers: a systematic review and meta-analysis

- Progressive resistance exercise + physical activity had strongest association with healing
  + additional 27 cases healed per 100 patients; 95% CI, 9-45 cases per 100; p<0.004

- Daily heel raises + physical activity (i.e. 30 min walking TIW) may be an effective adjuvant to compression for treating venous ulcers

Reference: Jull A et al. JAMA Dermatology. 2018;154(11):1304-1311
Dietary recommendations for adults with psoriasis or psoriatic arthritis from the medical board of the NPF: a systematic review

- BMI >25: dietary weight reduction with hypocaloric diet
- Celiac disease: gluten-free diet (3 month trial) -> universal screening for celiac disease not recommended
- Not recommended: empiric oral fish oil, vit D, selenium, vitamin B12
- Except: oral vit D (0.5ug alfalcacidol, 0.5-2ug calcitriol daily) for PsA as adjunctive intervention
- Mediterranean diet, extra virgin olive oil (low-quality evidence)

Reference: Ford A et al. JAMA Dermatology. 2018;154(8):934-950

Association of caffeine intake and caffeinated coffee consumption with risk of incident rosacea in women

- Cohort study: 82,737 women in Nurses’ Health Study II
- Prospective cohort established in 1989, follow-up 1991-2005
- Exposure: coffee, tea, soda, chocolate consumption
- Inverse association between increased caffeine intake and risk of incident rosacea (HR 0.76; 95% CI, 0.69-0.84; p< 0.001)
- Association was observed for caffeinated coffee (not decaf nor other caffeine sources)

Reference: Li S et al. JAMA Dermatology. 2018;154(12):1394-1400

Hidradenitis suppurativa and psoriasis: newly-recognized associations with IBD (2 papers)

Systematic review and meta-analysis: psoriasis and IBD
- Significant associations: Crohn disease (OR 1.70; 95% CI 1.20-2.4), UC (OR 1.75; 95% CI 1.49-2.5), increased risk of both (Risk ratio 2.53 CD, 1.7 UC)

Cross-sectional population-based analysis (Explorys): HS
- CD prevalence with HS – 2% (0.6% in non-HS, p<0.001)
- Association strongest for men, age 45-64, nonobese, nonsmokers

References: Fu Y et al. JAMA Dermatology. 2018;154(12):1417-1423
Garg A et al. JAMA Dermatology. 2018;154(7):814-818
Dupilumab: noteworthy news

- Newer indications:
  - Severe hand eczema
  - Bullous pemphigoid (single case report)
  - Alopecia areata (single case report)
  - Prurigo nodularis (2 case series, total 7 patients): itch, flatten lesions

- Patch testing on dupilumab may result in allergen-specific responses
  
  Raffi et al. JAMA Dermatology. 2018; online first November 28, 2018

Dupilumab-associated conjunctivitis

Lubricating eyedrops +/- antihistamine
[ketotifen, olopatadine GTT TID]

Rx: Dexamethasone 0.1% eyedrops QID
[prednisolone, flurometholone, loteprednol]

Maintenance: Cyclosporine eyedrops

Reference: Levine R et al. JAMA Dermatology. 2018;154(12):1485-1486

Selected shorts: Research letters & Observations

- Bosentan for cutaneous ulcers in anti-MDA5 Dermatomyositis (Combalia A et al, 154(3):372-373)
- Tolcapone + low-dose NB-UVB for vitiligo (Kim S et al, 154(3):370-371)
- HPV vaccine for SCCs? Systemic and intratumoral 9-valent HPV vaccine leads to complete regression of cSCC in 1 pt (Nichols A et al, 154(8):927-930)
- Tacrolimus swish & spit BID (1mg/500cc water, 2 minutes) for geographic tongue (Aung-Din D et al, 154(12):1481-1482)
- Crisaborole 2% for palmoplantar psoriasis (Robbins A et al, 154(9):1096-1097)
Highlights of 2018

Drug complications

Association of bullous pemphigoid with dipeptidyl-peptidase 4 inhibitors in patients with diabetes

- Retrospective case-control study (Israel) (82 pts with BP, 328 controls)
- DPP-4 inhibitor agents and metformin – occurrence of BP
- Median follow-up period: 2 years
- DPP-4: 3x increased risk of BP (aOR, 3.2; 95% CI 1.9-5.4)
- Vildagliptin: aOR 10.7; 95% CI 5.1-22.4
- Independent of metformin, M>F
- Higher mucosal involvement (22.2% vs 6.5%; p=0.04), lower eos count

Reference: Kridin K et al. JAMA Dermatology. 2018;154(10):1152-1158
Lee SG et al. JAMA Dermatology. 2018;online first Jan 9, 2019

Endocrine therapy-induced alopecia in patients with breast cancer

- Retrospective cohort study (n=112) with EIA
  - 75(67%) aromatase inhibitor-induced alopecia
  - 37(33%) tamoxifen-induced alopecia
- 96 of 104 patients (92%), grade 1 severity (clinical pattern = AGA)
- Significant QOL impact
- Moderate or significant improvement on topical minoxidil in 37 pts (n=46, 80%)

Association between HLA-B*1301 and dapsone-induced cutaneous adverse drug reactions: a systematic review and meta-analysis

- 3 studies: 2 in Chinese populations, 1 Thai population
- Summary OR: 43.0; 95% CI, 24.0-77.2
- Subgroup analysis:
  - DRESS (OR, 60.8; 95% CI, 7.4-496.2)
  - SJS/TEN (OR, 40.5; 95% CI, 2.8-591)
  - SJS/TEN-DRESS overlap (OR, 54.0; 95% CI, 8.0-366.2)
- Recommend genetic screening for HLA-B*1301 in Asians before dapsone

Reference: Tangamomsuksan W et al. JAMA Dermatology. 2018;154(4):441-446

Highlights of 2018

Key issues in our field

- Medical scribes and patient satisfaction (Nambudiri V et al)
- Physician assistant diagnostic accuracy (if needed to biopsy) (Anderson A et al)
- Drug pricing and market competition (Li D et al)
- Cost of medications for unresectable melanoma: when is cost too much? (Almutairi A et al, DiMagno S et al)
- Machine learning is here to stay (Zakhem G et al, Adamson A et al)
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