Don’t routinely prescribe antibiotics for bilateral lower leg redness and swelling

Cellulitis is commonly misdiagnosed and may be incorrectly applied as a diagnosis in 1 in 3 cases. There are many causes of ‘pseudocellulitis’, including: stasis dermatitis, acute lipodermatosclerosis, lymphedema, eczematosus dermatitis, contact dermatitis, gout and tinea pedis. The most common among these is stasis dermatitis which generally affects the bilateral lower legs. In the setting of bilateral lower leg skin changes, causes of ‘pseudocellulitis’ should be considered.

Don’t routinely prescribe topical combination corticosteroid/antifungal products

Topical corticosteroid/antifungal products in cream or ointment formulations contain high-potency corticosteroids generally considered inappropriate for skin conditions affecting the face and skin folds. These have been prescribed for suspected superficial fungal infections and diaper dermatitis. However, evidence demonstrates inferior clinical efficacy, higher recurrence rates and harmful side effects (skin thinning and systemic absorption) compared to topical antifungals alone. In practice, their use may complicate diagnosis and prolong treatment. Suspicion of fungal infection should be confirmed by skin scraping, and fungal infections with substantial itch may be treated with a short-term topical mild to moderate corticosteroid prescription.

Don’t routinely use topical antibiotics on a surgical wound.

Post-surgical wounds in dermatology may be closed with stitches or allowed to heal in from the base. Most dermatologic procedures result in wounds that are classified as ‘non-contaminated’ and have low baseline potential for infection. For wounds closed with stitches, the potential harms (allergic contact dermatitis to topical ingredients, antibiotic resistance) outweigh the marginal reduced risk of postoperative infection achieved by use of antibiotics applied to the skin. Only wounds that show symptoms of infection (purulence, swelling, spreading redness, wound breakdown and systemic symptoms) should receive appropriate antibiotic treatment.

Don’t prescribe systemic anti-fungals for suspected onychomycosis without mycological confirmation of dermatophyte infection

Fungal nail infections account for half of all causes of nail changes (onychodystrophy). The other half can be attributed to conditions such as onychogryphosis (secondary nail thickening), psoriasis and lichen planus. Health care providers vary in their ability to correctly predict fungal toenail infections which can be confirmed by simple microscopy, fungal culture, or histology. Systemic antifungals indicated for moderate to severe nail infection can result in a variety of drug-drug interactions and confer increased risk for heart and liver failure. Confirming a fungal infection can prevent unnecessary treatment with avoidable harms and guide the diagnosis of other possible causes.

Don’t use oral antibiotics for acne vulgaris for more than 3 months without assessing efficacy.

Antibiotics are the most common systemic agent prescribed for the treatment of acne, employed for their antibacterial and anti-inflammatory effect. Prolonged antibiotic courses can lead to disruption of the normal microbiome, increased rates of upper respiratory infection and has been linked to the development of other systemic disorders. There are also rising rates of antibiotic resistance to pathogenic acne bacteria. For moderate or more severe acne warranting systemic treatment, the effect of oral antibiotics should be reassessed after 3 months to gauge progress. If ineffective, treatment should be modified to other systemic medications such as anti-androgens (spironolactone), combined oral contraceptive pills or retinoids. Use of oral antibiotics should always be combined with topical benzoyl peroxide and/or a topical retinoid.

Don’t order unnecessary blood tests (ie. complete blood counts and basic metabolic panels) for the routine monitoring of isotretinoin in otherwise healthy individuals treated for acne.

Laboratory abnormalities like CBC abnormalities (anemia, thrombocytopenia, leukopenias), hypertriglycerideremia, and transaminitis have been reported to be associated with isotretinoin when treating acne. These associations have led to uncertainty on the appropriate monitoring of patients and variation in clinical practice. Evidence suggests monitoring a complete blood count to be unnecessary in otherwise healthy individuals treated for acne with isotretinoin, as when
abnormal values occur they are generally transient or remain stable with continued treatment. Rare reports of clinically
significant CBC abnormalities are likely idiosyncratic reactions or due to another etiology such as post-infectious neutropenia
in adolescents. Furthermore, a Delphi consensus study among acne experts advises against routine basic metabolic panels,
GGT, bilirubin, albumin, total protein, LDL, HDL, or CRP monitoring as they are unlikely to change management. Further,
these unnecessary tests add significant costs and may be a burden on patients. This consensus recommends monitoring
triglycerides and ALT at baseline and once peak dose is attained. If normal, it does not need to be repeated monthly, and
it is not required at the end of treatment. If abnormal, then it is warranted to continue monitoring to follow these parameters,
although most cases remain transient and reversible in otherwise healthy patients treated for acne.
How the list was created
A working group of Canadian Dermatology Association (CDA) members was created based on interest in the topic of resource stewardship in Dermatology. The working group undertook a review of Choosing Wisely Dermatology specialty recommendations in other jurisdictions, followed by a focused review of published literature with the keywords evidence-based medicine, value-based healthcare, and dermatology. From this aggregated list of recommendations, items that were inappropriate for our jurisdiction and disputed by most recent evidence were excluded. Five guidelines were selected for the ‘core recommendations’ and an additional five guidelines were included in a ‘supplemental list’. Reviewers varied in practice type and geography were asked to consider the following criteria in evaluating the recommendations: relevance to dermatology, frequency of occurrence and potential for harm. Reviewers were asked to agree or disagree with the core recommendations and propose a replacement from the supplemental list or another source if there was disagreement. The final consensus list was then approved by the CDA Board of Directors and presented at the CDA 2018 Annual Conference.

Sources


About Choosing Wisely Canada
Choosing Wisely Canada is the national voice for reducing unnecessary tests and treatments in health care. One of its important functions is to help clinicians and patients engage in conversations that lead to smart and effective care choices.

ChoosingWiselyCanada.org  |  info@ChoosingWiselyCanada.org  |  @ChooseWiselyCA  |  f/ChoosingWiselyCanada