

Revisión de Rosacea tomado del buscador DynaMed

Types:

subtypes of rosacea (patients may have multiple subtypes concurrently)

- subtype 1 - erythematotelangiectatic rosacea
 - flushing and persistent erythema on central portion of face
 - telangiectasias are common, but not required
 - swelling, stinging, burning, roughness, scaling, and history of flushing may be seen
- subtype 2 - papulopustular rosacea
 - persistent central facial erythema with transient papules or pustules
 - resembles acne vulgaris, but without comedones
 - burning and stinging may also occur
- subtype 3 - phymatous rosacea
 - thickening skin, irregular nodularities, and enlargement
 - rhinophyma common but may also occur on chin, forehead, cheeks, and ears
 - telangiectases or large follicles may occur
- subtype 4 - ocular rosacea
 - symptoms may include watery or bloodshot eyes, foreign body sensation, burning or stinging, dryness, itching, light sensitivity, blurred vision, telangiectases, and conjunctivitis
 - styes are common
 - corneal complications may decrease visual acuity, with risk for loss of vision

Reference - consensus committee of National Rosacea Society (J Am Acad Dermatol 2002 Apr in [Am Fam Physician 2002 Jun 15;65\(12\):2596](#))

Who is most affected: adult onset (most often age 30-60 years), women predominate
Incidence/Prevalence: prevalence 14% in women and 5% in men, based on Swedish study of 809 randomly selected clerical workers ([Acta Derm Venereol 1989;69\(5\):419](#)) 1.1 million office visits for rosacea annually in United States from 1990 to 1997 ([Cutis 2001 Aug;68\(2\):156](#)) rosacea affects an estimated 13-14 million Americans ([Nurse Pract 1997 Oct;22\(10\):18](#), [National Institute of Arthritis and Musculoskeletal and Skin Diseases \(NIAMS\)](#))

Causes: unknown alcohol and sun exposure may increase erythema and cause rosacea flare-ups, but do not cause rosacea

Possible risk factors: sun exposure, based on survey of 20,637 persons ([Arch Dermatol 1988 Jan;124\(1\):72](#))

Complications: rhinophyma - irreversible hypertrophy of nose resulting from chronic deep inflammation 6-18% of patients with acne rosacea may have ocular rosacea; review of ocular rosacea can be found in [Curr Opin Ophthalmol 2004 Dec;15\(6\):499](#)

Chief Concern (CC): flushing with increase in skin temperature

History of Present Illness (HPI): factors noted as primary trigger of flare-ups by > 10% subjects in study of > 400 rosacea patients were sun, stress, hot weather, alcohol, and spicy food hot fluids (water or coffee) and not caffeine (cold coffee) associated with flushing in rosacea ([J Invest Dermatol 1981 Jan;76\(1\):15](#))

Medication History: steroid rosacea occurs after patient with rosacea uses prolonged topical steroids, especially fluorinated topical steroids steroids may initially improve erythema but chronic steroids may induce erythema, scaling, purpura, telangiectasias, atrophy, exuberant papules and pustules, painful burning sensations when steroids withdrawn treat by slowly tapering steroid strength and frequency of application (since rosacea worsens with cessation of steroids) Reference - Cortlandt Forum 1999 Sep;12(9);144 even low-potency steroids can induce acne rosacea; retrospective study of 106 children < 13 with steroid rosacea, 54% had used class 7 steroids (the weakest agents) ([Arch Pediatr Adolesc Med 2000 Jan;154\(1\):62](#) in Am Fam Physician 2000 Apr 15;61(8);2482)

Skin: flushing (erythema), telangiectasia (dilated blood vessels), papules, pustules symmetrical distribution on face (forehead, cheeks, nose, occasionally around eyes) may also have keratitis, edema resembles acne but NO comedones picture can be found in [Mayo Clin Proc 2004 Sep;79\(9\):1192 full-text](#)

HEENT: ocular involvement common in cutaneous rosacea, doxycycline may be useful adjunct to topical therapy ([Arch Dermatol 1997 Jan;133\(1\):49](#) in Am Fam Physician 1997 Aug;56(2):609), editorial can be found in [Arch Dermatol 1997 Jan;133\(1\):89](#) may have rhinophyma

► **Diagnosis Rule out:** may resemble malar erythema of lupus erythematosus (discoid lupus) drug-induced acne, contact dermatitis, photosensitivity (drug-induced, polymorphous light eruption), Pityrosporum folliculitis, sarcoidosis, seborrheic dermatitis sudden onset of severe flushing - carcinoid syndrome, mastocytosis, pheochromocytoma pseudorhinophyma - erythema and edema of nose due to constricting eyeglasses, resolves with less constricting nose piece (anecdotal report in Fam Pract News 2001 Dec 1;31(23);12)
Blood tests: negative ANA, low complement level

Prognosis: chronic (lasting years) with intermittent flares and quiescent periods

Treatment overview: reduction or elimination of provoking factors if identified topical metronidazole is reasonable first-line therapy palliative but not curative shown to be effective in multiple placebo-controlled randomized trials azelaic acid (Finacea 15% gel twice daily or Azelex 20% cream once daily) as or more effective than topical metronidazole in randomized trials benzoyl peroxide/clindamycin (BenzaClin) effective in 2 randomized placebo-controlled trials other effective topical therapies based on single placebo-controlled randomized trials benzoyl peroxide clindamycin (Cleocin) permethrin 5% cream other agents that have been used for rosacea, but data limited oral antibiotics (tetracycline, erythromycin, metronidazole) topical tretinoin (Retin-A) oral isotretinoin (Accutane) topical sulfacetamide/sulfur lotion (Sulfacet, Novacet)

Medications: limited high-quality evidence exists for rosacea treatments systematic review of 29 randomized trials in patients with moderate to severe rosacea most were poor quality, no studies assessed quality of life some evidence of benefit found for topical metronidazole (2 trials with 174 patients), topical azelaic acid (4 trials), oral tetracycline (3 trials with 152 patients) and oral metronidazole (1 small trial) Reference - systematic review last updated 2005 May 20 ([Cochrane Library 2005 Issue 3:CD003262](#)) metronidazole available topically as gel (0.75%), cream (0.75% or 1%) or lotion (0.75%) topical metronidazole preparations once or twice daily for 7-12 weeks significantly more effective than placebo in patients with moderate to severe rosacea; mean number of papules and pustules decreased by 48-65%, most of benefit observed within first 3 weeks (based on 1 study), limited data suggests topical metronidazole as effective as oral tetracyclines, no effect on telangiectasia, local side effects reported in 2% of patients or less ([Am J Clin Dermatol 2000 May-Jun;1\(3\):191](#)) metronidazole

1% cream twice daily and oxytetracycline 250 mg PO twice daily had similar efficacy in randomized trial of 51 patients ([Br J Dermatol 1983 Jul;109\(1\):63](#)) metronidazole gel (MetroGel) prevented relapse in 1 of every 5 patients treated for 6 months; 113 patients with rosacea treated with tetracycline PO and topical metronidazole gel up to 16 weeks, 88 patients who responded were then randomized to metronidazole vs. placebo gel twice daily for 6 months, 23% vs. 42% relapse, 53% vs. 32% free of papules + pustules ([Arch Dermatol 1998 Jun;134\(6\):679](#) in J Watch 1998 Aug 1;18(15);122) metronidazole 1% cream with sunscreen SPF 15 superior to placebo in 12-week randomized trial of 120 patients with moderate to severe rosacea ([J Cutan Med Surg 2002 Nov-Dec;6\(6\):529](#)) metronidazole 0.75% cream once daily and metronidazole 1% cream once daily had similar efficacy in 12-week randomized trial of 72 patients with facial erythema, pustules and papules ([J Am Acad Dermatol 2001 Nov;45\(5\):723](#)) metronidazole 1% cream once daily more effective than placebo in 10-week randomized trial ([Cutis 1998 Jan;61\(1\):44](#)) topical metronidazole may be effective for rosacea blepharitis; 10 patients with ocular rosacea randomized to treat 1 eyelid with lid hygiene and topical metronidazole and other eyelid with lid hygiene alone, 8 metronidazole-treated and 5 control eyes improved ([Ophthalmology 1996 Nov;103\(11\):1880](#)) metronidazole 1% (Noritate) cream once daily; pregnancy category B, not recommended in nursing mothers, may potentiate oral anticoagulants; 40-58% improvement vs. 14-30% with placebo in clinical trials (Monthly Prescribing Reference 1998 Mar;A-12) metronidazole 0.75% lotion (MetroLotion) approved for treating inflammatory papules and pustules of rosacea (Monthly Prescribing Reference 1999 May:A-10) MetroGel 1% once daily FDA approved for inflammatory lesions of rosacea (Monthly Prescribing Reference 2005 Aug:A-19) azelaic acid 20% cream (Azelex) once daily or 15% gel (Finacea) twice daily at least as effective as topical metronidazole azelaic acid 15% gel twice daily more effective than placebo in 2 randomized trials with total 664 patients with moderate papulopustular rosacea; improvement in erythema reported in 44-46% azelaic acid groups vs. 28-29% placebo groups (NNT 7) ([J Am Acad Dermatol 2003 Jun;48\(6\):836](#)) azelaic acid 20% cream effective and well tolerated in papulo-pustular rosacea; 116 patients with papulo-pustular rosacea randomized to azelaic acid 20% vs. vehicle cream twice daily for 3 months, mean reductions in total inflammatory lesions (73.4% vs. 50.6%, $p = 0.011$), mean reductions in erythema severity score (47.9% vs. 37.9%, $p = 0.031$), no improvement in telangiectasia, no significant differences in local adverse events (39.5% vs. 38.5%) ([Acta Derm Venereol 1999 Nov;79\(6\):456](#)) azelaic acid 15% gel (Finacea) modestly more effective than metronidazole 0.75% gel (MetroGel); 251 patients with papulopustular rosacea and persistent erythema and telangiectasia randomized to azelaic acid 15% vs. metronidazole 0.75% gel twice daily for 15 weeks; mean nominal lesion count reduced by 12.9 vs. 10.7 ($p = 0.003$), mean decrease in inflammatory lesions 73% vs. 56% ($p < 0.001$), 56% vs. 42% rated erythema severity as improved ($p = 0.02$, NNT 7.2), neither treatment improved telangiectasia; 26% vs. 7% had facial side effects (NNH 5.2) ([Arch Dermatol 2003 Nov;139\(11\):1444](#)), commentary can be found in [Am Fam Physician 2004 Mar 1;69\(5\):1221](#) azelaic acid 20% cream safe and effective alternative to metronidazole 0.75% cream for chronic rosacea; 40 patients > 21 years old with persistent symmetrical erythema affecting cheeks after washout periods for topical metronidazole (21 days) and tretinoin or isotretinoin (1 year) were randomized to azelaic acid vs. metronidazole to either side of face twice daily for 15 weeks, 3 patients dropped out, both treatments achieved similar improvement in skin dryness and burning, neither treatment had significant effect on telangiectasia or itching, azelaic acid performed marginally better, patients more satisfied with azelaic acid ([J Am Acad Dermatol 1999 Jun;40\(6 Pt 1\):961](#) in Modern Med 1999 Oct;67(10);52) azelaic acid 15% gel (Finacea) FDA approved for inflammatory papules and pustules of mild to moderate rosacea, massage thin layer into affected areas of face twice daily

for up to 12 weeks (PDR Monthly Prescribing Guide 2003 Mar;2(3):9, [Am Fam Physician 2003 Apr 1;67\(7\):1626](#)) azelaic acid 15% gel (Finacea) at least as effective as topical metronidazole but may be more irritating, no effect on telangiectasia or rhinophyma, applied twice daily, 30 g tube costs \$43.50 which is roughly comparable to metronidazole products (MetroGel 0.75%, Noritate 1% cream) ([The Medical Letter 2003 Sep 15;45\(1165\):76](#)) other topical therapies that have shown efficacy in randomized trials topical clindamycin twice daily as effective as oral tetracycline in 12-week randomized trial of 43 patients with rosacea ([Int J Dermatol 1993 Jan;32\(1\):65](#)) benzoyl peroxide acetone gel (5% for 4 weeks then 10% for 4 weeks) superior to placebo in randomized trial of patients with rosacea ([Cutis 1983 Aug;32\(2\):185](#)) benzoyl peroxide 5%/clindamycin 1% gel (BenzaClin) superior to placebo in 12-week randomized trial of 50 patients with rosacea, 7% vs. 0 became "clear/nearly clear" (NNT 14), 15.4% vs. 4.2% had "marked improvement" (NNT 6 for clear or marked improvement) ([Cutis 2004 Jun;73\(6 Suppl\):11](#)) and superior to placebo in 12-week randomized trial of 53 patients with rosacea ([Int J Dermatol 2004 May;43\(5\):381](#)) permethrin 5% cream twice daily for 2 months as effective as metronidazole; 63 patients with papulopustular rosacea were randomized to permethrin 5% (Zavlor) cream vs. metronidazole 0.75% (Roza) gel vs. placebo cream to apply to face twice daily for 2 months, all patients given SPF 20 cream for sun protection, both active treatments equally effective and more effective than placebo for erythema and papules; permethrin had no effect on telangiectasia, rhinophyma, and pustules ([Dermatology 2002;205\(3\):265](#)), commentary can be found in [POEMs in J Fam Pract 2003 Mar;52\(3\):183](#), commentary can be found in [Am Fam Physician 2003 Apr 15;67\(8\):1782](#) sodium sulfacetamide/sulfur topical solution Novacet Lotion (sodium sulfacetamide 10% + sulfur 5%) approved for rosacea 1-3 times daily (Monthly Prescribing Reference 1997 Jul;A-23) sodium sulfacetamide 10%/sulfur 5% (Rosula Lotion) available in alcohol-free, urea-based solution (PDR Monthly Prescribing Guide 2003 Mar;2(3):17) sodium sulfacetamide/sulfur combination products also include Rosula Gel, Clenia Cream, and Clenia Wash (Prescriber's Letter 2003 Apr;10(4):22) no randomized trials of sodium sulfacetamide/sulfur combination for rosacea found in MEDLINE search 2005 Feb 20 topical tretinoin 0.025% cream appears as effective as oral isotretinoin (Accutane) or combination topical tretinoin/oral isotretinoin at 16 weeks in randomized trial of 22 patients with severe or recalcitrant rosacea ([Arch Dermatol 1994 Mar;130\(3\):319](#)) addition of low-dose doxycycline to topical metronidazole may reduce inflammatory lesions 40 adults with rosacea and 18-30 inflammatory lesions were randomized to doxycycline hyclate 20 mg vs. placebo twice daily in addition to metronidazole 0.75% topical lotion twice daily for 12 weeks, then doxycycline vs. placebo monotherapy for 4 more weeks group receiving subantimicrobial dose of doxycycline had greater reduction in total inflammatory lesion count at 4 weeks (-10 vs. 04, p = 0.048) and all subsequent visits doxycycline associated with more gastrointestinal disturbances (25% vs. 10%, NNH 6) Reference - [J Am Acad Dermatol 2005 Nov;53\(5\):791](#) in QuickScan Reviews in Fam Pract 2006 May 9;32(4):12 low-dose doxycycline (Oracea) 40 mg/day will cost about \$150 per month (Prescriber's Letter 2006 Jul;13(7):39) addition of gluconolactone-containing skin care products to azelaic acid 15% gel may slightly reduce signs and symptoms of rosacea ([level 2 \[mid-level\] evidence](#)) 67 women ages 19-66 years with rosacea and 5-50 inflammatory papules and pustules, persistent erythema and telangiectasia all used azelaic acid 15% gel twice daily and were randomized to nonstandardized skin care (instruction to continue habitual self-selected cleanser and moisturizer) vs. 4% gluconolactone facial cleanser plus 10% gluconolactone moisturizing cream (NeoStrata brands) for 12 weeks 5 women lost to follow-up, 62 women completed study median inflammatory lesion count decreased from 10 to 1 in control group and from 7 to 2 in gluconolactone group, no significant differences comparing groups comparing control vs. gluconolactone mean

erythema score (on 0-3 scale) 2 vs. 2 at baseline mean erythema score 1.5 vs. 1 at 12 weeks (p = 0.001) similar minimal to modest differences favoring gluconolactone reported for telangiectasia, burning, itching and stinging Reference - [Journal of Cosmetic Dermatology 2006 Mar;5:23 full-text](#) other oral antibiotics that have been used for rosacea include tetracycline (oxytetracycline, minocycline, doxycycline) 100-200 mg/day metronidazole 200 mg twice daily erythromycin less effective or ineffective therapies topical erythromycin less effective than topical metronidazole (Prescriber's Letter 2003 Apr;10(4):22) topical azithromycin 2% less effective than topical erythromycin 2% in 12-week randomized trial with 20 patients ([J Dermatolog Treat 2004 Sep;15\(5\):295](#)) *Helicobacter pylori* eradication not effective for improving rosacea in 2 placebo-controlled randomized trial ([J Korean Med Sci 2000 Oct;15\(5\):551](#), [Arch Dermatol 1999 Jun;135\(6\):659](#)) Surgery: treatments for rhinophyma include electrosurgery, laser, surgery, dermabrasion electrocautery or laser therapy may be used for unsightly telangiectasias

Prevention and Screening: not applicable

General references used: [Postgrad Med 1999 Feb;105\(2\):149](#) Reviews: [N Engl J Med 2005 Feb 24;352\(8\):793](#) . [J Fam Pract 2005 Sep;54\(9\):777](#) [Am Fam Physician 2002 Aug 1;66\(3\):435](#) [J Am Board Fam Pract 2002 May-Jun;15\(3\):214 PDF](#) [Postgrad Med 2002 Dec;112\(6\):51](#), commentary can be found in [Postgrad Med 2003 May;113\(5\):20](#) review of ocular rosacea can be found in [Curr Opin Ophthalmol 2004 Dec;15\(6\):499](#)

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