Contact dermatitis.

Erythematous papules, vesicles, and serous weeping localized to areas of contact with the offending agent are characteristic.
Bacterial conjunctivitis.

Note the conjunctival injection and purulent discharge.
Viral conjunctivitis.

Note the conjunctival injection and watery discharge.
Allergic conjunctivitis.

Note the edematous, boggy conjunctiva.
Anterior uveitis.

Note the conjunctival injection with ciliary flush (circumcorneal erythema) and hypopyon (pus pooling in front of the iris; see arrow).
Hordeolum.

Focal swelling and erythema at the lid margin are seen.
Chalazion.

Note the nodular focal swelling and erythema.
Vitreous hemorrhage.

The effect of gravity on the vitreous blood creates the appearance of a flat meniscus (keel-shaped blood) in a patient with vitreous hemorrhage associated with proliferative diabetic retinopathy.
Retinal detachment.

Note the elevated sheet of retinal tissue with folds. In this patient, the fovea was spared, so acuity was normal but a superior detachment produced an inferior scotoma.
Optic neuritis.

Optic nerve pallor, either segmental (as in this case; see arrow) or generalized, is a nonspecific change that may be associated with a previous episode of optic neuritis or other insults to the optic nerve.
Age-related macular degeneration

Note the macular drusen and retinal pigment epithelial atrophy (scalloped pigment loss) that are typical of age-related macular degeneration.
Nonproliferative diabetic retinopathy.

Hard exudates, dot hemorrhages, blot hemorrhages, flame hemorrhages, and microaneurysms are present.
Proliferative diabetic retinopathy.

There is extensive neovascularization of the disk with an associated small intravitreal hemorrhage that obscures the upper temporal vessels. Along the inferior temporal arcade is another area of neovascularization.
Papilledema.

This obese young women with pseudotumor cerebri was misdiagnosed as a migrainer until fundus examination was performed showing optic disk elevation, hemorrhages, and cottonwool spots.
Acute otitis media.

Note the bulging, dull, erythematous tympanic membrane with pus behind it (see arrow).
HSV 1° gingivostomatitis.

Multiple oral ulcerations are seen.
Penile warts.

Note the multiple soft, filiform papules on the glans penis and prepuce.
Chancroid.

Note the multiple painful, punched-out ulcers with undermined borders on the labia.
Psoriasis vulgaris (elbow).

Note the well-demarcated erythematous plaque with thick white scale.
**Pityriasis rosea.**

Pink plaques with an oval configuration are seen that follow the lines of cleavage. Inset: Herald patch. The collarette of scale is more obvious on this magnification.
Cutaneous candidiasis: intertrigo.

Confluent bright red papules with “satellite” pustules are seen.
Symptomatic livedo reticularis.

A bluish, netlike, arborizing pattern is seen on the posterior thighs and buttocks.
Lichen planus.

Flat-topped, polygonal, sharply defined, shiny, violaceous papules are seen.
Pyoderma gangrenosum.

A painful ulcer is seen with a dusky-red peripheral rim and an undermined border.
Dermatomyositis.

Heliotrope (reddish-purple) erythema of the upper eyelids can be seen along with edema of the lower lids.
Acanthosis nigricans.

Note the velvety, dark brown epidermal thickening of the armpit.
Oral hairy leukoplakia.

Note the corrugated white plaque on the lateral tongue. Essentially pathognomonic for HIV infection.
Erythema multiforme.

Targetoid lesions are seen on the palms.
Bullous pemphigoid.

Tense bullae with serous fluid are seen.
Pemphigus vulgaris.

Because of the fragility of the blisters, pemphigus vulgaris presents as erosions.
Stevens-Johnson syndrome.

Generalized eruption of initially targetlike lesions that become confluent, brightly erythematous, and bullous.
Toxic epidermal necrolysis.

Bulla formation with rapid desquamation.
Superficial spreading melanoma.

A highly characteristic lesion is seen with an irregular pigmentary pattern and scalloped borders.
Nodular basal cell carcinoma.

Note the smooth, pearly nodule with telangiectasias.
Acute meningococcemia.
Phlegmasia cerulea dolens of the left lower extremity.
Janeway lesions in endocarditis.
2° syphilis.
Rocky Mountain spotted fever.
Erythema multiforme.
Gottron’s papules in patient with dermatomyositis.
Tophaceous gout of the elbow.
Onycholysis in a psoriatic arthritis patient.
Oral ulcer on hard palate of patient with SLE.
Iron deficiency anemia.

Note hypochromic cells (prominent central pallor) and microcytosis (RBCs smaller than the nucleus of the lymphocyte).

There is also prominent thrombocytosis, a common finding associated with iron deficiency.
Megaloblastic anemia.

Note the macro-ovalocytes and prominent hypersegmented neutrophil.
Spherocytes.

Characteristic spherocytes (small, round RBCs without central pallor) are present in addition to signs of markedly ↑ RBC synthesis (polychromasia, nucleated RBCs) in a patient with extravascular immune hemolysis.
Schistocytes.

A large number of fragmented RBCs is characteristic of microangiopathic or intravascular hemolysis. In this case, the patient had HUS.
Bite cells.

Several characteristic bite cells are present in this patient with G6PD deficiency with acute oxidative hemolysis.
\(\beta\)-thalassemia major.

Note the microcytic, hypochromic cells, target cells, and nucleated RBCs.
Sickle cell anemia.

Multiple sickle forms are characteristic.
**Myelodysplasia.**

Both neutrophils in this slide demonstrate hypogranulation and hypolobation (pseudo–Pelger-Huët anomaly), suggesting myelodysplasia.
Chronic myelogenous leukemia.

Note the large number of immature myeloid forms in the peripheral blood, including metamyelocytes, myelocytes, and promyelocytes, as well as a large number of eosinophils and basophils.
Myelofibrosis.

Note the large number of teardrop cells suggestive of bone marrow infiltrative disease.
Babesiosis on a blood smear.

Note the parasites within RBCs resembling malaria.
Atypical lymphocytosis seen in infectious mononucleosis and other infections.

These reactive T lymphocytes are large with eccentric nuclei and bluish-staining RNA in the cytoplasm.
Falciparum malaria on a thin blood smear.

Young signet-ring-shaped parasites are seen for all species of *Plasmodium*, but only *P. falciparum* shows multiple parasites within a single RBC.
Vivax malaria on a thin blood smear.

Blood smear of *Plasmodium vivax* showing both a ring form and a female gametocyte.
Pneumococcal pneumonia.

This Gram-stained sputum sample shows many neutrophils and lancet-shaped gram + cocci in pairs and chains, indicating infection with *S. pneumoniae*.
Gonococcal urethritis: Gram stain of *Neisseria gonorrhoeae*

Multiple gram–ive diplococci are seen within PMNs as well as in the extracellular areas of a smear from a urethral discharge.
Gout crystals.