Actinic keratoses (AKs) typically present as scaly, erythematous papules (bumps) or rough patches on sun-exposed areas and are the most common precancerous skin lesions. Treatment is necessary because approximately 2 to 15% of lesions may progress to non-melanoma cutaneous skin cancer (NMSC).

Three strategies for treatment are commonly used:
1. Physical destruction (such as liquid nitrogen therapy)
2. Topical chemotherapy (such as 5-fluorouracil or imiquimod)
3. Light therapy (such as photodynamic therapy—PDT)

Therapy is determined by location (face, scalp, forearms, or legs) and extent (few versus multiple).

Liquid nitrogen therapy
- Some patients may experience redness, swelling, blistering, pain, or scab formation at sites of liquid nitrogen therapy that may last for 3 to 5 days after treatment.
- Treated areas should be covered with non-medicated ointment (petrolatum) and a bandage until all signs of treatment-related inflammation are resolved.

Topical treatment (such as 5-fluorouracil or imiquimod)
- Follow your doctor’s instructions on how to apply the cream, including:
  - where to apply the cream
  - how many times a day to apply the cream
  - the length of treatment
- Some patients may experience redness, swelling, blistering, pain, or scab formation at treated areas that may last for 3 weeks after treatment.

- After the treatment course is completed, red and/or inflamed areas may benefit from application of a non-medicated ointment (such as petrolatum) or a medium-strength topical steroid ointment (such as hydrocortisone or desonide) for several days to weeks. Consult your doctor for advice on skin care following your treatment.
- Topical treatments for actinic keratoses often increase sun sensitivity and risk for sunburn. It is important to avoid the sun during the treatment as well as for several weeks afterwards (see below).
- Some patients may have persistent redness (faint pink) and slight tenderness for 3 to 6 months following the treatment.

Sunscreen and photoprotection
Many patients experience increased sensitivity to sun exposure after treatment of actinic keratoses. There is also new data that regular sunscreen use may prevent the recurrence of actinic keratoses in certain individuals. Avoid the sun during its peak hours (typically 10 am to 2 pm) and consult your doctor for advice on how to choose and apply sunscreen, as well as for other tips for photoprotection (such as hats, gloves, and protective clothing).

Notes from your doctor