

When you take a multi-targeted approach\* across patient types

## Consider Acthar Gel in the treatment of keratitis

**Patient type:** Tough-to-treat disease; high disease activity

Not an actual patient.

### Clinical case study

**Diagnosis:** Severe keratitis

Woman, aged 54 years, with a 20-year history of dry eye, experiencing eye and periocular pain and redness

**Case study provided by:**

**Melissa Toyos, MD**

Toyos Clinic

Nashville, TN

**This case study is provided for general medical education purposes only and is not a substitute for independent clinical medical judgment. The intent of this case study is to present the experience of an individual patient, which may not represent outcomes in the overall patient population. Response to treatment may vary from patient to patient.**

\*Acthar Gel is indicated for certain immune-mediated and idiopathic conditions across a range of therapeutic areas and may be appropriate for multiple patient types.

## INDICATION

Acthar® Gel is indicated for severe acute and chronic allergic and inflammatory processes involving the eye and its adnexa such as: keratitis, iritis, iridocyclitis, diffuse posterior uveitis and choroiditis, optic neuritis, chorioretinitis, anterior segment inflammation.

## SELECT IMPORTANT SAFETY INFORMATION

### Contraindications

Acthar is contraindicated:

- For intravenous administration
- In infants under 2 years of age who have suspected congenital infections
- With concomitant administration of live or live attenuated vaccines in patients receiving immunosuppressive doses of Acthar
- In patients with scleroderma, osteoporosis, systemic fungal infections, ocular herpes simplex, recent surgery, history of or the presence of a peptic ulcer, congestive heart failure, uncontrolled hypertension, primary adrenocortical insufficiency, adrenocortical hyperfunction, or sensitivity to proteins of porcine origin

Please see additional Important Safety Information throughout and full [Prescribing Information](#).

**Acthar® GEL**  
(repository corticotropin injection) 80 U/mL

## History and examination were consistent with tough-to-treat disease and high disease activity

### Clinical examination<sup>1</sup>

- Patient had meibomian gland dysfunction, dry eye disease, and ocular rosacea
- Signs and symptoms of dry eye disease began 1–2 years after LASIK and progressively worsened each year
  - Symptoms included eye and periocular pain and redness
- Prior medical history that was significant for dry eye OU included:
  - Thyroidectomy
  - Menopause
  - Bilateral LASIK (2004)
  - Infected punctal plugs that required surgical debridement (2013)
- Patient lost the ability to perform activities of daily life

### Treatment history<sup>1</sup>

- After treatment with:
  - Thyroid hormone replacement: no noticeable change and patient remains on this medication
  - Bepotastine twice daily for 6 months: minimal improvement
  - Alcaftadine once daily for 2 months: no improvement
  - Cyclosporine 4 times daily for 10 years: discontinued due to adverse event
  - Lifitegrast twice daily for 1 year: discontinued due to adverse event
  - Artificial tears as necessary for 20 years: ongoing treatment with minimal improvement
  - Platelet-rich plasma eye drops (2–4 drops) for 3 months: questionable improvement
  - Eight intense pulsed light treatments over 4 years: mild improvement

## SELECT IMPORTANT SAFETY INFORMATION

### Warnings and Precautions

- The adverse effects of Acthar are related primarily to its steroidogenic effects
- Acthar may increase susceptibility to new infection or reactivation of latent infections
- Suppression of the hypothalamic-pituitary-adrenal (HPA) axis may occur following prolonged therapy with the potential for adrenal insufficiency after withdrawal of the medication. Adrenal insufficiency may be minimized by tapering of the dose when discontinuing treatment. During recovery of the adrenal gland patients should be protected from the stress (e.g., trauma or surgery) by the use of corticosteroids. Monitor patients for effects of HPA axis suppression after stopping treatment
- Cushing's syndrome may occur during therapy but generally resolves after therapy is stopped. Monitor patients for signs and symptoms
- Acthar can cause elevation of blood pressure, salt and water retention, and hypokalemia. Monitor blood pressure and sodium and potassium levels

## Patient required an alternative treatment

### Decision to treat with Acthar Gel<sup>1</sup>

- Patient had tough-to-treat disease and high disease activity
  - Remained symptomatic following prior use of several available over-the-counter and prescription therapies
- Initiated 80 units of Acthar Gel twice weekly



### Results after Acthar Gel therapy<sup>1</sup>

- Improvements were observed in signs and symptoms of dry eye from baseline to Week 12
- Patient reported symptom improvements
- Symptom improvement was noted within 2–3 weeks of treatment with Acthar Gel
- No adverse events were observed

### Ocular assessments from baseline to Week 12 of Acthar Gel therapy<sup>1</sup>

	Baseline	Week 1	Week 2	Week 12
Visual acuity	OD 20/25; OS 20/16	OU 20/16	OU 20/16	OU 20/16
SPK	OD 71; OS 163	OD 40; OS 30	OD 30; OS 75	OD 0; OS 0
Lissamine green	OD 1277; OS 1230	OD 300; OS 500	OD 250; OS 500	OD 180; OS 150
IOP	OD 14; OS 13	OU 14	OU 13	OU 14
Dryness scale (visual analog scale)*	67	62	58	10

IOP=intraocular pressure; OD=oculus dexter; OS=oculus sinister; OU=oculus uterque; SPK=superficial punctate keratitis.

\*Dryness scale (0=no symptoms, 100=worst pain).

Clinical outcomes may not be solely attributable to Acthar Gel.

Commonly reported postmarketing adverse reactions for Acthar include injection site reaction, asthenic conditions (including fatigue, malaise, asthenia, and lethargy), fluid retention (including peripheral swelling), insomnia, headache, and blood glucose increased.

Dosage should be individualized according to the medical condition of each patient. Frequency and dose of the drug should be determined by considering the severity of the disease and the initial response of the patient.

Sudden withdrawal of Acthar Gel after prolonged use may lead to adrenal insufficiency or recurrent symptoms. It may be necessary to taper the dose and increase the injection interval to gradually discontinue the medication.

**Reference:** 1. Data on file: REF-MNK04715. Mallinckrodt ARD LLC.

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- Cushing's syndrome may occur during therapy but generally resolves after therapy is stopped. Monitor patients for signs and symptoms
- Acthar can cause elevation of blood pressure, salt and water retention, and hypokalemia. Monitor blood pressure and sodium and potassium levels
- Acthar often acts by masking symptoms of other diseases/disorders. Monitor patients carefully during and for a period following discontinuation of therapy
- Acthar can cause gastrointestinal (GI) bleeding and gastric ulcer. There is also an increased risk for perforation in patients with certain GI disorders. Monitor for signs of perforation and bleeding

- Acthar may be associated with central nervous system effects ranging from euphoria, insomnia, irritability, mood swings, personality changes, and severe depression to psychosis. Existing conditions may be aggravated
- Patients with comorbid disease may have that disease worsened. Caution should be used when prescribing Acthar in patients with diabetes and myasthenia gravis
- Prolonged use of Acthar may produce cataracts, glaucoma, and secondary ocular infections. Monitor for signs and symptoms
- Acthar is immunogenic and prolonged administration of Acthar may increase the risk of hypersensitivity reactions. Cases of anaphylaxis have been reported in the postmarketing setting. Neutralizing antibodies with chronic administration may lead to loss of endogenous ACTH and Acthar activity
- There may be an enhanced effect in patients with hypothyroidism and in those with cirrhosis of the liver
- Long-term use may have negative effects on growth and physical development in children. Monitor pediatric patients
- Decrease in bone density may occur. Bone density should be monitored in patients on long-term therapy

#### Adverse Reactions

- Commonly reported postmarketing adverse reactions for Acthar include injection site reaction, asthenic conditions (including fatigue, malaise, asthenia, and lethargy), fluid retention (including peripheral swelling), insomnia, headache, and blood glucose increased
- The most common adverse reactions for the treatment of infantile spasms (IS) are increased risk of infections, convulsions, hypertension, irritability, and pyrexia. Some patients with IS progress to other forms of seizures; IS sometimes masks these seizures, which may become visible once the clinical spasms from IS resolve

#### Pregnancy

- Acthar may cause fetal harm when administered to a pregnant woman

Please see full **Prescribing Information**.

