KPV

Rapid and Sustained Improvement in Chronic Polyarticular Symptoms Temporally Associated With Subcutaneous KPV

RTP RESEARCH

EVIDENCE TYPE

Retrospective, uncontrolled N-of-1 human case report. This is not a non-clinical experiment or controlled clinical trial.

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EDITORIAL NOTE

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Rapid and Sustained Improvement in Chronic Polyarticular Symptoms Temporally Associated With Subcutaneous KPV

A retrospective, uncontrolled N-of-1 observational case report | Draft for clinical and scientific review | 17 October 2026

Participant: 36-year-old male | Observation: approximately June–October 2026 | Author identification withheld in this draft

Abstract

Background: KPV (Lys-Pro-Val), a tripeptide derived from α-melanocyte-stimulating hormone, has shown anti-inflammatory activity in preclinical experimental systems. Its effectiveness and safety for injected treatment of human joint symptoms are unestablished.

Case: A 36-year-old male described approximately one year of redness, swelling, stiffness, and functional impairment affecting fingers, knuckles, hands, knees, and ankles. By October 2025 he had stopped running and was unable to make a fist. In June 2026, he began self-administered nightly subcutaneous KPV, initially 1 mg. He reported disappearance of joint redness, swelling, and stiffness within 12 hours of the first administration, recovery of hand function, and return to running within one week. He subsequently described further reduction in peripheral swelling, removal of two watch links, resizing a wedding ring from size 10 to 9, and no recurrence through the reported observation period. Seasonal rhinitis symptoms also reportedly subsided over several days. No noticeable adverse effects were reported.

Interpretation: The temporal association is notable but cannot establish causation. Concurrent tirzepatide, GHK-Cu, alcohol reduction, possible other exposures, unverified product quality, absent inflammatory biomarkers, and lack of a confirmed joint diagnosis substantially limit inference.

Introduction

KPV is a three-residue peptide related to the C-terminal sequence of α-MSH. Experimental studies in intestinal inflammation models have investigated peptide transport and suppression of inflammatory signaling, including NF-κB and MAPK pathways [1–3]. These preclinical findings do not demonstrate benefit for human arthritis, allergic rhinitis, or subcutaneous use. This report describes one person's retrospective account, with longitudinal routine laboratory data included as contextual observations rather than proof of anti-inflammatory efficacy.

Case presentation

The participant reported progressive symptoms for approximately one year, involving the hands, fingers, knuckles, knees and ankles. Symptoms included visible redness and swelling, stiffness, inability to close the hand into a fist, and inability to continue running. He reported stopping an eight-year running habit in October 2025 when symptoms became unbearable. No

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clinician-established diagnosis, rheumatologic examination, joint imaging, serum urate, CRP, ESR, rheumatoid factor, or anti-CCP result was supplied. He suspected insulin resistance and alcohol as contributing causes, but neither causation nor insulin resistance was established.

Exposure and methods

The participant reported a 10 mg KPV vial with a certificate of analysis indicating confirmed identity and 99.4% purity. The COA itself was not reviewed. The testing method, issuing laboratory, batch traceability, sterility, endotoxin testing, and concentration after reconstitution are unknown. He reported reconstitution with bacteriostatic water and subcutaneous evening administration. These details describe self-reported exposure and are not dosing recommendations.

Period	Reported nightly KPV amount
Week 1	1 mg
Week 2	1.5 mg
Weeks 3–4	2 mg
Week 5	5 mg; perceived diminishing additional benefit
Week 6 onward	3 mg

This is a retrospective uncontrolled self-observation, not a prospectively registered trial. No standardized joint examination, symptom diary, blinded assessment, control period, validated allergy scale, or quantitative joint circumference measurement was performed. Exact calendar dates for initial administration and dose changes were not provided.

Results

Early response and function

The participant stated that less than 12 hours after the first 1 mg injection, he awoke without the previously experienced joint redness, swelling, or stiffness. He reported restored ability to make a fist and resumption of running approximately seven days after starting KPV. Relief continued on the second morning and no subsequent joint symptom recurrence was reported through the observation period.

Peripheral swelling and perceived dose response

The participant perceived progressively greater reduction in swelling as exposure increased. He removed two links from a wristwatch and was able to wear his size 10 wedding ring again; he subsequently resized it to size 9, which he reported maintaining for approximately two months. These are nonstandardized proxies for changes in fit and circumference and could be influenced by weight, fluid balance, or other factors. The participant did not attribute weight loss to KPV; numerical weights at treatment start and follow-up were not provided. At 5 mg, he reported diminishing returns rather than a specific adverse event.

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Rhinitis symptoms and tolerability

Historically, March–August brought sneezing, congestion, itchy and watery eyes, and postnasal drip. The participant reported that these symptoms diminished gradually over several days after starting KPV and that he stopped allergy medications. Allergen exposure and the date of medication discontinuation were not documented. He reported no noticeable adverse effects. He missed one nightly dose without noteworthy symptom changes; this does not establish persistence beyond one missed dose or long-term safety.

Concurrent exposures and alternative explanations

The participant used semaglutide from October 2025 to March 2026, then began tirzepatide in March 2026, reporting titration no higher than 10 mg weekly and maintenance at 8 mg weekly from August 2026. GHK-Cu was started approximately one month before KPV; he noticed no improvement in joint symptoms before KPV introduction. Alcohol intake reportedly fell from 15–20 to 7–8 drinks weekly during June 2026, approximately coincident with KPV initiation. Exact relative timing is unknown. Other hormones and peptides were not fully enumerated for June, so concurrent exposure cannot be ruled out. Changes in metabolic treatment, alcohol intake, spontaneous disease fluctuation, changes in training, and unmeasured exposures could contribute to symptom changes.

Longitudinal laboratory context

Original collection dates: 23 December 2020, 18 April 2024, 15 December 2025, 11 August 2026, and 20 September 2026. The participant reports all glucose draws were fasting; the 2024 source report does not itself document fasting. The September 2026 panel contains hormone/thyroid measures but no comparable routine inflammation, metabolic, or blood-count panel. Hematocrit is intentionally omitted from this research appendix at participant request.

Marker (unit)	2020	2024	2025	Aug 2026
Glucose (mg/dL)	89	101	88	74
Triglycerides (mg/dL)	104	171	64	NM
HDL-C (mg/dL)	68	62	77	NM
LDL-C (mg/dL)	86	100	97	NM
Creatinine (mg/dL)	1.02	1.17	1.06	1.11
eGFR (mL/min/1.73 m^2)	98*	84	94	88
AST (U/L)	23	30	31	23
ALT (U/L)	23	23	22	24
WBC (×10^3/μL)	5.7	5.7	4.6	6.8
Platelets (×10^3/μL)	259	256	293	294

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NM = not measured in the available report. *2020 value is the historical non-African-American estimate using an older equation; eGFR methods are not necessarily identical across reports. The 2024 glucose of 101 mg/dL is in the impaired-fasting-glucose range if the subject-reported fasting status is accurate; this alone does not establish insulin resistance. Triglycerides improved before KPV initiation and cannot be attributed to KPV. No serial CRP, hs-CRP, ESR, or other direct inflammatory measurements are available. Normal or changing WBC and transaminases do not demonstrate resolution of synovial inflammation.

Discussion

This report's most distinctive feature is the reported onset of complete symptomatic relief within 12 hours of first exposure, followed by improved function and no reported recurrence. The clinical importance of restored running and fist closure is considerable to the participant. However, the timing and outcomes were retrospectively recalled, with no independently measured baseline or follow-up joint status. It is unknown whether the original symptoms reflected inflammatory arthritis, crystal arthritis, edema from another cause, or a fluctuating condition. Clinical assessment remains appropriate despite symptom improvement.

Preclinical KPV experiments involving intestinal epithelial transport, inflammatory signaling, and mouse colitis support a hypothesis of immunomodulatory activity [1–3]. Translating these mechanisms to subcutaneous administration and human joints requires pharmacokinetic, safety, and controlled efficacy studies. The reported rhinitis improvement is exploratory; seasonal timing, changes in medication, and allergen exposure are alternative explanations.

The reported COA purity of 99.4% cannot be independently verified here, and chemical purity alone does not demonstrate injectable sterility, endotoxin control, identity of the administered vial, or clinical safety. No validated human KPV dosing regimen is established. The participant's absence of noticed side effects cannot exclude delayed, subclinical, or uncommon harms.

Limitations and future research

Limitations include n=1; self-selection; retrospective recall; no diagnostic confirmation; no pre-specified endpoints; no baseline/follow-up inflammatory biomarkers; no objective photographs or circumference measures; incomplete co-exposure history; concurrent alcohol reduction and incretin therapy; and unverified COA and sterility documentation. An ethically reviewed prospective study would require a defined clinical population, validated joint scores, appropriate comparison group, standardized inflammatory testing, product quality verification, adverse-event surveillance, and informed consent.

Conclusion

A 36-year-old male reported rapid and sustained improvement in previously disabling polyarticular symptoms after initiating subcutaneous KPV. The observations are hypothesis-generating and do not establish that KPV caused the improvement, treats arthritis or allergic rhinitis, or is safe for human injection.

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Ethics, consent and disclosures

This draft is based on participant-provided self-report and historical laboratory records. Written consent for publication, any required institutional determination, author affiliations, funding, conflicts of interest, and patient review of the final manuscript have not yet been documented. No identifying details are included in this draft.

References and source notes

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