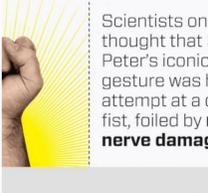


I'm not robot!



Scientists on thought that Peter's iconic gesture was an attempt at a closed fist, foiled by ulnar nerve damage.

PRESENTATION				
CONTEXT	Extending fingers/ulnar	Making a fist	Extending fingers/ulnar	Making a fist
LOCATION OF LESION	Distal ulnar nerve	Proximal median nerve	Distal median nerve	Proximal ulnar nerve
SIGN	"Ulnar claw"	"Pope's blessing"	"Median claw"	"OK gesture" (with digits 1-3 flexed)

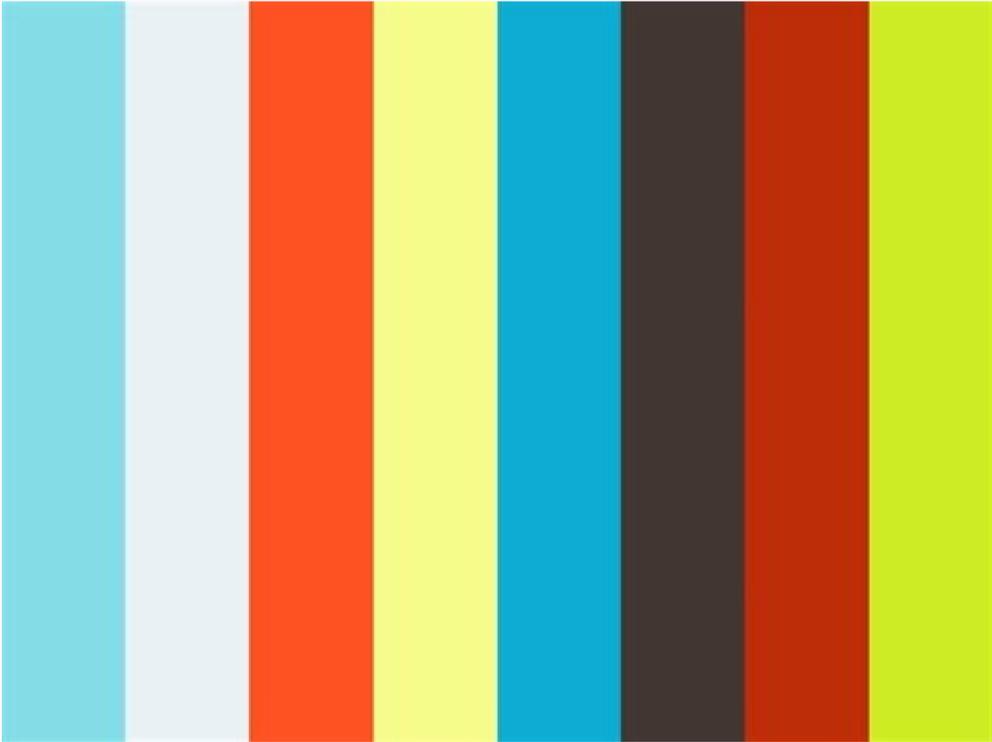


Photo: Bridgeman Images For physicians, the gesture used by some popes to confer a blessing, with the hand raised but the last two fingers curled inward, looks a lot like the deformity called main-en-griffe, or clawhand—a sign of nerve damage. Dr. Bennett Futterman, a professor of anatomy at New York Institute of Technology's College of Osteopathic Medicine, was long puzzled by the similarity. How, he wondered, did popes start using this peculiar gesture? Original Editor - Pamela Gonzalez Top Contributors - Laura Ritchie, Aminat Abolade, Kirenga Bamurange Liliene, Admin, Pamela Gonzalez, Kim Jackson, Rachael Lowe, David Adamson, WikiSysop, Lauren Kwant, Evan Thomas and Richard Benes The Benediction Sign is the result of peripheral neuropathy affecting musculature in the hand. It is seen when the patient is asked to make a fist and the ring and little finger flex but the index and middle finger can not flex at the metacarpal-phalangeal joint or interphalangeal joint. There is some controversy as to the source of the Benediction Sign for many years, specifically if the median nerve or the ulnar nerve is involved[1]. According to Futterman, [1] the desired position of the hand during a blessing or benediction would typically have been an open position with the fingers extended. In fact, he notes that the 4th and 5th digits would have been abducted from the second and third digits (similar to the hand sign used by Vulcans in the Star Trek TV and movie series). [1] Based on this author's research of cultural artwork, he asserts that Peter, the first Pope, had an ulnar neuropathy which limited Peter's ability to perform the then-traditional open hand blessing and has led to the hand position that has since become the norm for giving blessings.[1] In the presence of ulnar neuropathy, the function of the metacarpi and lumbrical muscles to the 4th and 5th digits would be compromised, thus the 4th and 5th digits could not abduct from the midline of the hand (interossei function) nor could those fingers flex at the MCP joints or extend at the IP joints (lumbrical function). Extensor digitorum (innervated by the radial nerve) acts primarily on the metacarpophalangeal (MCP) joint, not the interphalangeal (IP) joints, therefore it could not extend the IP joints to compensate for the loss of lumbrical function. [2] As a result, during an attempt to extend the 4th and 5th digits (as in the open hand blessing described above) the MCP joints be extended but the IP joints would stay flexed. Futterman [1] notes that Benediction Sign is often described as a median nerve injury because this would result in an inability to perform flexion at the MCP and IP joints of the 2nd and 3rd digits. However, he notes that this would only make sense if the injured person was trying to make a fist and since a fist is not a historically-known sign of blessing or greeting, Benediction Sign must stem from an ulnar neuropathy and the subsequent inability to fully open the hand. Clinically Relevant Anatomy[edit | edit source] The ulnar nerve originates from the terminal branch of the medial cord of the brachial plexus and contains fibers from C8, T1, and, occasionally, C7. It innervates muscles in the anterior compartment of the forearm: Flexor carpi ulnaris and medial half of Flexor digitorum profundus, and muscles of the hand: Hypothenar muscle, Medial two lumbricals, Adductor pollicis, Palmar and dorsal interossei of the hand, and Palmaris Brevis. For more detailed information on the anatomy of the ulnar nerve Clinical Presentation[edit | edit source] Benediction Hand is presented with numbness of the fourth and fifth fingers and hand muscle weakness. The 4th and 5th fingers show a clawed-like appearance, with hyperextension at the metacarpophalangeal (MCP) joints and flexion of the proximal and distal interphalangeal (IP) joints, and the fingers and thumb are held slightly abducted. Tenderness or pain may be observed at the medial wrist or medial elbow region. [3] Differential Diagnosis[edit | edit source] Benediction hand indicates peripheral neuropathy, most likely an ulnar neuropathy and on physical examination, other clinical presentations associated with ulnar neuropathy could be observable. These include:[4] Atrophy of the intrinsic muscles ( the hypothenar muscles) Management and Treatment[edit | edit source] The treatment of Benediction Hand involves the management and treatment of ulnar and median nerve neuropathies by using: [5] Non-steroidal inflammatory drugs (NSAIDs) to control pain and prevent symptoms to get worse. [6] References[edit | edit source] ↑ 1.0 1.1 1.2 1.3 1.4 Futterman B. Analysis of the Papal Benediction Sign: the ulnar neuropathy of St. Peter. Clinical Anatomy. 2015 Sep;28(6):696-701. ↑ Extensor digitorum muscle. Available from: ( Last accessed, 13/02/2016). ↑ Floranda EE, Jacobs BC. Evaluation and treatment of upper extremity nerve entrapment syndromes. Primary care. 2013 Dec;40(4):925. ↑ Alsaftar RM, Hameed S. Benediction Hand (Benediction Sign, Preachers Hand). InStatPearls [Internet] 2020 Mar 1. StatPearls Publishing. ↑ Hand of Benediction. What Is It, Causes, and More. Available from: ( Accessed, 19/07/2021). ↑ FSUMedMedia. Claw Hand, Ape Hand, and the Sign of Benediction: Animated Review. Available from: [Accessed, 19/07/2021] By Amanda Schupak Updated on: September 23, 2015 / 2:34 PM / CBS News It'll be all eyes on the pope when Francis visits the U.S. next week, and if his past trips are an indication, we're likely to see a whole lot of waving and perhaps a handful of thumbs-up. But the traditional gesture of papal benediction -- a partially outstretched hand with fourth and little fingers curled inward -- dates back to Biblical times. It has a hallowed history -- and a bizarre beginning. According to research by anatomy professor Bennett Futterman at the NYIT College of Osteopathic Medicine, the first pope assumed this gesture because a nerve injury prevented him from opening his hand all the way. Rock star pope 29 photos Popes have been mimicking the unintended sign ever since. "Peter, the first pope, had an ulnar nerve injury and everyone copied him," said Futterman, who published a study this month in the journal Clinical Anatomy. "Imitation is a great form of flattery. Out of respect for St. Peter, the other popes followed with that same pattern." According to Futterman, there has been controversy as to the origin of the blessing gesture, with many saying that it was caused by damage to the median nerve, which runs from the shoulder, through the arm, to the tips of the four fingers. Damage to this nerve makes a person unable to make a fist; the ring and pinky fingers can't bend in, resulting in what orthopedists and anatomy textbooks call "Pope's Hand" or "Hand of Benediction." But that's misleading, says Futterman, who studied historical and religious statues, paintings and icons -- in addition to using his expertise as a former orthopedic surgeon -- to clear up the confusion. Pope Francis delivers his blessing to faithful during the Angelus noon prayer from his studio window overlooking St. Peter's Square at the Vatican, Sunday, Sept. 6, 2015. AP/Riccardo De Luca The assertion that a median nerve injury was at the root of St. Peter's hand position assumes that he was trying to make a fist but couldn't. "No holy man would ever bless the faithful, a crowd, or followers, by making a fist," Futterman said. Rather, he would do it with an open hand. An injury to the ulnar nerve, which runs along the pinky side of the hand, Futterman explained, would provide a better explanation. Ulnar nerve damage prevents a person from extending his fourth and fifth fingers away from the palm. "The way that Jewish high priests blessed the people is what most would recognize as the Vulcan or "Spock" gesture," Futterman said, referring to a flat-handed position made famous by Leonard Nimoy in "Star Trek," in which the pointer and ring fingers are separated into a V shape. According to Futterman's research, early Christians copied the Jewish high priests. "Later, Peter was trying to do that -- he would have blessed people the way he knew. But if you have an ulnar nerve injury, you can't spread your fingers and you can't extend your pinky and ring finger." Amanda Schupak Amanda Schupak is the science and technology editor at CBSNews.com First published on September 18, 2015 / 5:13 PM © 2015 CBS Interactive Inc. All Rights Reserved. Popes unwittingly mimicked a saint's partial paralysis every time they gave a blessing for decades, a new study has revealed. The study, published in the journal Clinical Anatomy, debunks an old claim found in medical textbooks, that St. Peter's original gesture of blessing—an awkward motion that involves curling the pinky and ring finger down while flexing the remaining fingers upward—stemmed from median nerve damage. Peter couldn't close his first two fingers into a fist, the theory goes, because of a median nerve injury so he settled for squeezing his fingers into a less ideal position. And an enduring papal gesture was born. When the Pope visits the United States on Tuesday, he will likely address throngs of the faithful with a wide open hand, or his signature thumbs-up gesture. But perhaps that's just because Pope Francis has a functioning ulnar nerve. The fresh evidence suggests textbooks misdiagnosed Peter's nerve injury. The new study points out that it is unlikely that any saint would attempt to bless his people with a defiant closed fist. "A fist has always been a symbol of war—it's never a positive position," said Bennett Futterman, an anatomy professor at New York Institute of Technology's College of Osteopathic Medicine in a prepared statement. "No holy man would ever bless the faithful, a crowd, or followers, by making a fist." Instead, Futterman says, it's likely Peter was attempting to mimic the Jewish Priestly Blessing which also happens to have inspired Spock's famous Vulcan salute. In that case, Peter wasn't trying in vain to close his first two fingers—he was actually straining to uncurl his lower two fingers. And that's not a sign of median nerve damage, as the textbooks claim, but a sign of ulnar nerve damage. The ulnar nerve runs from the elbow to the wrist along the pinky side of the hand, and controls the muscles that allow your ring finger and pinky finger to stretch away from your palm. "He would have blessed people the way he knew," says Futterman, referring to the Peter's attempt at the Jewish Priestly Blessing. "But if you have an ulnar nerve injury, you can't spread your fingers and you can't extend your pinky and ring finger." Despite its origins in physical deformity, many perfectly healthy Popes have chosen to emulate the awkward gesture, as a tribute to Peter. But it seems that Pope Francis is perfectly comfortable adopting his own hand motions and waving to the people with his fingers fully flexed. Live long and prosper, folks. Those popes had quite a nerve.

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