They dreamed of esports glory. Then their bodies broke down

Professional gaming is booming, with millions on offer for the best players. But esports is also taking a physical and mental toll – and some have decided that enough is enough

er wrists were in agony. Julia Bright had only been playing Overwatch online for two hours, a fraction of her usual daily investment in the game, but she could take no more; the pain was just too unbearable. Desperate to soothe her hand and forearms, she plunged them deep into a bucket of ice water. The freezing liquid helped a little bit but after a few minutes, the pain just continued to bother her.

This pain was bothering Bright a lot. She was aiming to become a pro player and was used to playing around eight hours of the game Overwatch, a wildly popular team-based first person shooter (FPS), every day. Lately, though, she had been forced to drastically curtail her practice sessions due to the pain she was experiencing. It was her right hand that hurt the most



- the one she used to hold her mouse. Bright had developed a habit of grasping the curved, jet-black device with a claw-like grip that tightened sharply during moments of intense play. "I want to play but my body just won't do it."



Bright is a 20 year old millennial and she lives with her parents in North Carolina. Since the age of 18, she's been gunning for a career as professional esports star. Those who make it in the Overwatch League can net six-figure salaries and the shared prize pools for a team is all

the way to 5 million dollars.

On paper, her chances were decent. She had a winning record, years of experience of pwning would-be challengers online, and a fantastic squad she played with every day. Also, she's always had a competitive spirit within herself which is a must for all pro gamers. "I always wanted to win," she said, "and I had a fire in like no other once Overwatch was released. I had found my calling."

But now, injured and relegated to the position of substitute on her team, everything was falling apart. She lay awake at night worrying, wondering whether the awful pain would plague her for life. Things had started to go awry early last year, prior to the second North American open season in *Overwatch*, in which highly ranked but non-pro players compete with one another online. For many, it's a major chance to prove their worth. Scouts and analysts for pro teams watch the open season closely, so performing well can be the first step towards launching a full-blown *Overwatch* career. But while she waited for the season to begin, Bright found herself distracted by another game.

"The way that I messed up," she remembers, "was I did not take care of my wrists while I was grinding *Apex Legends*." In the past, Bright says she'd made an effort to do hand stretches and take regular breaks. But *Apex Legends* – a then-newly released FPS game where players form small teams to battle others online – engrossed her to such an extent that she neglected to do this for around two months. That's all it took.

The pain start off small but got worse the more she played. She noticed that her worsening pain was accompanied by a strange, walnut-shaped swelling on her wrist. Her doctor referred her to a hand specialist but getting a satisfactory diagnosis took months. Initially, the specialist suggested Bright's injury was tendinitis, an inflamed tendon, something that likely just needed rest. But rest didn't help. Neither did physiotherapy or steroid injections. Nothing seemed to work.

An MRI scan in October revealed the cause of pain: a torn ligament and displaced tendon. Her doctor agreed it was most likely due to overuse from video gaming. The good news was that she now had the option of a surgery. "I cried my eyes out to my mom that night," Bright recalls. Having feared that she might be stuck with intense wrist pain for life, now, at least, she had hope.

After the operation, Bright wore a cast on her wrist for about six weeks and then a brace for another six after that. A few months of physical therapy and rest followed. Bright still plays video games – the FPS *Valorant* is her pursuit of choice at the moment – but only for short, 40-minute sessions at a time. She's had to accept that her hopes of becoming a pro gamer are over for now. Her wrist, while much better, is still only about 80 per cent recovered, she says, and in order to regain her competitive edge, she'd have to grind so much that she could jeopardize her health once again. "I was getting so close on my last team," she says. "I was the best I had ever been. It's hard to recognize that it's over."

Lindsey Migliore is a doctor who understands the ins and outs of gaming. She has been playing video games since she was six years old – all the way through school, college and into her career in medicine. A few years ago, she started playing the hugely popular battle royale title *Fortnite* regularly with a group of seven friends, all of whom were doctors as well. When they started experiencing hand pain around the same time, Migliore, a physical medicine and rehabilitation doctor, realized that it was likely connected to their intense gaming sessions.

Many medical professionals are still waking up to the fact that esports competitors are at risk from serious health issues. But there is little official guidance on esports medicine and doctors don't often get a chance to assess pro gamers before their injuries and ailments ramp up. Migliore, who styles herself as 'GamerDoc', says her own experiences have inspired her to try to change this.



For two years now, she has worked directly with esports athletes – as a medical professional advising school-age competitors and also as a consultant for pro teams. But people get in touch with her <u>online all the time, to</u>o, she says.

She gets direct messages on Twitter two or three times a day, on average, from someone worried about a symptom potentially linked to gaming. Migliore, who doesn't provide medical advice over Twitter, says she does her best to point people in the direction of useful resources or professionals who can help them. She knows how bad things can get. A handful of gamers Migliore has worked with directly have been left with constant pain. "Over time, you get these chronic micro traumas, these tears," she explains, describing what can happen to human tissues after years of button-mashing. Then, a slight but sudden shock to that muscular tissue, anything from pushing a heavy bag into a car boot or swinging a bowling ball can cause a bigger injury in the worn out area.

And while she hasn't seen a displaced tendon like the one suffered by Bright among any of her own patients yet, she acknowledges that it's something that could happen to ANY gamer. Esports athletes, she says, perform up to 600 actions per minute with their fingers while playing some games. "Our hands are not used to that kind of interactivity but human hands evolved from climbing trees so maybe this is the next time in our evolution".

It's an increasingly common problem for aspiring gamers. Esports is booming. Professional gaming is now a billion-dollar industry with an estimated global audience of around 500 million people, and tournaments where prize pools stretch to many millions of dollars. In some countries, including the UK, it's even possible to join an esports program at school or get an esports scholarship to university. Is this worth the risk? Will we see an increase of these injuries? According to Migliore is bound to happen. "Doctors in this field are hearing about these injuries more and more. As the gaming community continues to expand, it's bound to have more injuries like those that Bright is experiencing."