GEL REPAIRS NERVE DAMAGE

SUGGESTED INTRO:
MEDICAL RESEARCHERS IN CLEVELAND ARE CREATING SPECIAL GELS DESIGNED TO HEAL DAMAGED NERVES. THOUGH STILL EXPERIMENTAL, MUCH PROGRESS IS BEING MADE. HERE’S A REPORT:

[VIDEO]
Shot of medical researcher at microscope. Cut to CU of dish containing nerve regenerating hydrogel. Efx transition to still shot of nerve fibers growing in hydrogel. Cut to shot of Ravi Bellamkonda (lead researcher) with colleague at microscope. Cut to ECU of dish containing gel and plastic tubes used to channel nerve growth. Cut to time-lapse footage of nerve growing in hydrogel.

[ON-CAMERA INTERVIEW]
SOT & SUGGESTED SUPER:
RAVI BELLAMKONDA, PROF., BIOMEDICAL ENGINEERING, CASE WESTERN RESERVE UNIVERSITY
Cut-away to shot of hands manipulating

[VOICEOVER] - OPEN
MEDICAL RESEARCHERS ARE DEVELOPING CUSTOM DESIGNED HYDROGELS THAT STIMULATE NERVE GROWTH OVER LARGE GAPS THAT WOULD NORMALLY PREVENT HEALING. RESTORING PERIPHERAL NERVE FUNCTION IS THEIR AIM, AND NOT THEY STRESS, CURING PARALYSIS. STILL, HOPES ARE HIGH FOR SOMEDAY REPLACING SURGICAL NERVE GRAFTS BY INTRODUCING CHEMICAL GELS THAT STIMULATE NERVE REGENERATION. RAVI BELLAMKONDA, A BIOMEDICAL ENGINEER AT CASE WESTERN RESERVE UNIVERSITY IS LEADING THE RESEARCH.

[INTERVIEW] “If you crush a nerve you can’t bring the two ends together and suture it together. If it’s a thin cut that’s fine, if you just put them back they grow. If it’s a large gap they don’t grow and so the whole research that we’re trying to do is to try to say OK, can we make something that’s like a gel, like you squish

-more-
[VIDEO]
dish containing gel w/plastic tubing. Cut to ECU of dish containing hydrogel and tubes. Cut back to Ravi Bellamkonda on-camera. 
Cut to shot of researcher at microscope. Dissolve to shot of microscopic shot of nerves growing in hydrogel. Cut back to Bellamkonda on-camera. 
Cut to 2 shot of CWRU medical researchers working with hydrogels. 
Nerves growing in hydrogel (zoom-in). 
Dissolve to CU of piping gels from large to small dish. 
Cut to 2 shot (pan) of Bellamkonda and other researcher at microscope. Cut to shot of hands cutting plastic tubing into dish containing gel (zoom-in). 
Cut to black. 

[AUDIO]
[VOICEOVER] – CLOSE 
[INTERVIEW - CONT.] out of your toothpaste kind-of-thing, that you put across the nerve gap and the nerve follows along and goes to the other end and makes its connections. If your nerves are inside your spinal cord or your brain they don't grow at all. If they're outside they're called peripheral nerves and they grow a little bit, so we are basically trying to make gels that can make nerves grow across large gaps. (00:37:27) 
EACH YEAR THOUSANDS OF AMERICANS SUFFER LIFE-LONG DISABILITIES THAT RESULT FROM PERIPHERAL NERVE DAMAGE, MUCH OF IT DUE TO THE DISTANCE BETWEEN SEVERED NERVES. THOUGH SEVERAL YEARS AWAY FROM CLINICAL USE, HYDROGELS BEING DEVELOPED AT CASE WESTERN RESERVE COULD SOMEDAY BRIDGE THE GAP BETWEEN PERIPHERAL NERVE INJURIES AND THE TREATMENT DOCTORS ARE LOOKING FOR. THIS IS DAVE NAROSNY REPORTING FROM CASE WESTERN RESERVE UNIVERSITY, CLEVELAND. 

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