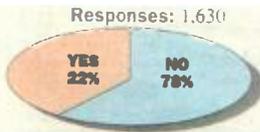


Do you think it's unfair to ask motorists to provide proof of insurance when they register a car?



music scene:
'97 promises to be light and fluffy

LIVING/D1



black and blue out: How to remove stains

LIVING/D1

The Sun



SAN BERNARDINO COUNTY

67°/38°

S.B. Valley: Mostly sunny
Smog level: Good
County/East Valley Final Edition

Baby receives an early present

■ Doctor takes surgical tool designed for one purpose and invents new way to attach human tissue.

By STACY SPAULDING DELAY
Sun Staff Writer

LOMA LINDA — Juan Santiago will celebrate his one-month birthday Wednesday, but doctors already have given him a Christmas present: new skin.

The Indio baby was born Nov. 25 with no skin over 30 percent of his body, a condition called cutis aplasia. His abdomen, sides and a few spots on his thighs looked like open wounds, said doctors.

The risk of infection was great.

So Dr. Douglas Hendricks, a professor of plastic and reconstructive surgery, scheduled skin grafts for Juan when he was 4 days old. There was only one problem: How to attach the skin to the tiny baby. Sutures or stitches could have torn delicate tissues. Using staples could pierce a lung or an intestine.

But Hendricks solved the problem.

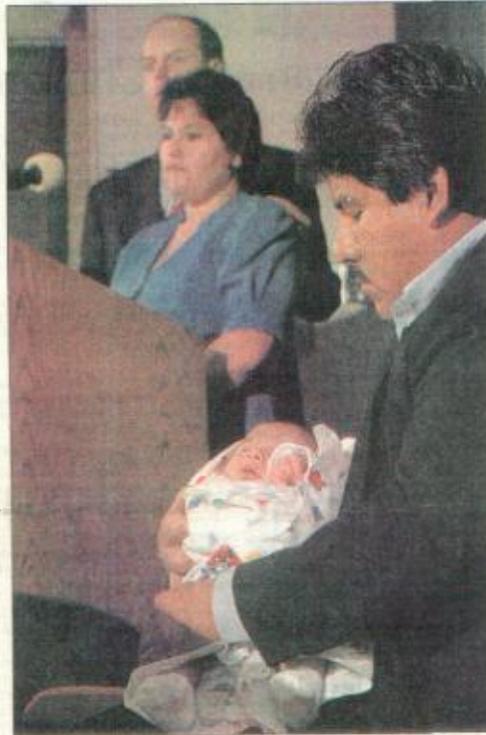
And his solution, announced Monday in a news conference at Loma Linda University Medical Center, could replace staples and stitches altogether.

"It's a totally new way of putting tissue together," said Dr. Wolf Kirsch, chairman of the university's Department of Neurosurgery.

Kirsch, along with Dr. Yong Hua Zhu, invented a vessel closure system along with an engineer in Albuquerque.

The hand-held device previously was used to connect blood vessels with titanium clips that held them together without punctures.

But on Nov. 29, the day of



ERIC PARSONS/The Sun

Juan Santiago holds his sleeping infant son Monday as the baby's mother, Irma, joins Dr. Douglas Hendricks to discuss the recent skin-graft surgery.

Juan's surgery, Hendricks grabbed the clip applicator off the shelf to hold the new skin together.

Hendricks had used the clips before in microsurgery, and thought it could work in Juan's case. Others weren't so sure, he said.

"The nurses thought I was crazy," he said.

But it worked. Using skin from Juan's back and scalp, Hendricks made a quilt of skin by patching small pieces together with the clips.

The skin wasn't punctured and the procedure won't leave scars, Hendricks said.

And maybe best of all, the clips fall off as the skin heals and flattens, eliminating the

need for follow-up visits to remove sutures or staples.

Doctors hailed the grafts a success Monday, when they announced Juan's discharge from the hospital.

Juan, sporting a new crop of black hair, slept in his father's arms, oblivious to his place in Loma Linda's hall of fame.

"I really want Juan to go home today with his parents," Hendricks said. "I think that he's almost, not quite, as strong as any other baby this same age."

Juan's parents, Indio residents Irma Lopez and Juan Santiago, couldn't thank doctors enough.

"Thank you for a great Christmas present," Santiago

See BABY/A2

Baby: Doctors deliver an early Christmas present

Continued from A1

told Hendricks after the press conference.

Juan's condition may have begun 12 weeks into pregnancy, Hendricks said. That's when a twin baby died inside the womb.

"Biochemical mechanisms get started to essentially mop up," Hendricks said. "But they can also act to attack a live baby."

Lopez is just glad to be going home.

"We're very grateful," Lopez said. "It was hard on all of us, having a baby and not having a baby."

Lopez wasn't able to hold Juan until after the surgery when

he was several weeks old, she said.

"They took him away from us as soon as he was born. We didn't get to hold him or anything because he was in bad shape," Lopez said.

In fact, Juan was kept paralyzed in a drug-induced coma for four days, Hendricks said.

"One little slip of a tube, one little slip of an IV and it could have been a disaster," Hendricks said.

About 90 of the millimeter-long clips were used on Juan. Most already have fallen off.

Hendricks said it was the small size of the clips that made them work so well.

"Every instrument I had in the operating room was too big," he said. "The instrument used to shave the skin is longer than the baby's body. To shave and try to get skin grafts was quite a chore."

The clips have been on the market for a little over a year, said Zhu. He and Kirsch have been working on the technique since 1982, he said.

The success of Juan's skin grafts may pave the way for the clips to be used in closing wounds, burns and even in correcting cleft lips.

With the right technology, the small clips could be used in surgeries on babies who are still inside the womb, Hendricks said.

Juan still faces some surgery

on his thighs, said Hendricks.

"Juan is out of danger, so there's not an emergency to operate on the scarbands that don't allow him to straighten his legs," Hendricks said.

The surgery will be performed after the baby gains some weight and his immune system develops a bit more, probably between the ages of 3 and 6 months, Hendricks said.

Juan went home Monday night to three sisters, ages 6 through 10, and to scores of relatives who can't wait to see him, Lopez said.

"I'm just happy," she said. "I can't wait to get him home and have him in his crib."