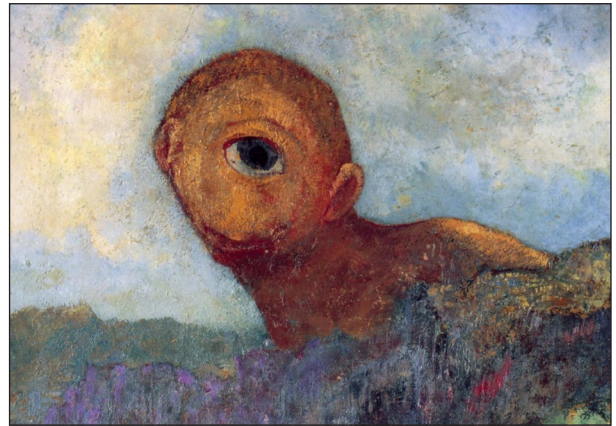


Sonic Hedgehog: Genetic Abnormalities and Tissue Donation

by

Lauren E. Yaich

Department of Natural Sciences
University of Pittsburgh at Bradford



Dr. Hannah Reed threw herself down onto the couch in the doctors' lounge on the maternity ward. She groaned and looked up at the ceiling. Dr. Tom Gonzalez glanced up from the charts he was reviewing. "What's the matter, Hannah? Has the stork been busier than usual?"

"I wish it were just that," replied Hannah. "It was a really bad scene down in the delivery room this morning. The parents have been trying for years to get pregnant and unfortunately, when they finally did, the baby was stillborn."

"I'm really sorry to hear that. But you see these things happen all the time. Today you look like you've seen a ghost!"

"I'm sorry, but..." Hannah trailed off and her eyes misted over. Tom rushed over to her side and put his arm around her shoulders. "Come on, Hannah. It can't be that bad. You've been through worse than this."

"No," gulped Hannah, recovering some of her composure. "You see, the baby wasn't just stillborn. It was severely deformed. Unfortunately, the nurses and I were so stunned we didn't remove the baby from the view of his parents before they saw him."

"Oh no! What was the matter?" asked Tom.

"The child had only a single eye with a proboscis-like structure above it. It was really shocking to see." Hannah shook her head sadly. "Right away I knew it was probably a case of holoprosencephaly. When I was a medical student I worked with Dr. Ross Grey, a leading researcher in craniofacial development. Back then we were doing some really exciting experiments on a gene called Sonic hedgehog and its role in the development of the brain and craniofacial structures. In fact, my familiarity with this disease made things this morning go from bad to worse."

"What do you mean?" asked Tom.

"Well, when I left Dr. Grey's lab, he knew I was planning to go into obstetrics and he asked me if I would be willing to continue collaborating with him. You know, send him tissue samples and things like that whenever I came across an interesting case. The case this morning was certainly an interesting, though tragic, case. And so, after the nurses had cleaned up the mother and the parents had settled down a little, I asked them if they

would be willing to donate their baby's body for the cause of advancing science. I told them that we now know of possible links between mutations in Sonic hedgehog and holoprosencephaly and that the more cases we could study the faster the field could advance."

"Oh," said Tom. "Did you phrase it like that?"

"Yeah, why?" frowned Hannah.

"Never mind. Go on."

"Well, they seemed somewhat reluctant. I thought that since they were young and didn't have much money maybe we could help them out a little. I told them that Dr. Grey had ties with a big pharmaceutical company and that I was sure financial reimbursement could be arranged."

Tom groaned and looked at the floor.

"What's the problem, Tom? I wasn't trying to be crass or anything. It's just that there is so much potential for us to be able to detect and maybe even prevent or treat these awful illnesses someday soon. Unfortunately, there is always a shortage of tissues available for experimental purposes. It seemed to me like we would be able to help more people in the future and that the family might receive some solace from that thought, not to mention a little financial reimbursement for their hardships as well," argued Hannah.

Just then the doors to the lounge burst open. Dr. Linda Crain, the department chief, and Bob Rollins, the hospital's CEO, charged in.

Linda walked over to Hannah. "We need to talk," she began.

"What were you thinking of?" Bob cut in, thrusting his face within inches of Hannah's. "I've got a family that's threatening to sue the hospital. Their lawyer just got off the phone with me an hour ago. He claims that you contributed to the mental anguish of his clients. The hospital is in enough financial straits without another lawsuit on our hands. I think you better start looking for a good lawyer, and another job while you're at it."

"Please, Bob, let's not get hysterical," Linda interjected, pulling Bob back. "There may be a way to work things out so that everyone will be satisfied. I spoke again with the family members after the lawyers called. The husband in particular seems to be a bit more understanding of why Hannah suggested what she did. It turns out that he was a pre-med student for a while before he changed majors in college, so he has some understanding of the needs of medical research. He is also concerned that something positive should come out of the death of their child. The mother, on the other hand, is still very distraught. She had already chosen a name for the child and redecorated the nursery. To her, this baby already existed in their lives."

Hannah nodded and looked down at the floor. "I know, I know. I didn't handle things very well. But the benefits that we might be able to achieve someday by having access to the child's body or at least some tissue samples..." Hannah trailed off, looking at Linda imploringly.

"I understand, Hannah," sighed Linda. "As I said, there might be some way to work this out that will satisfy everybody's best interests. The family and their lawyer have agreed to meet with us to try and settle this issue without taking it to court. We'll be meeting tomorrow morning in the upstairs conference room. The

father did seem somewhat sympathetic to the needs of the research community. Perhaps, if you can present a strong enough case while being sensitive of their feelings and concerns, we can salvage this situation. I'll see you all tomorrow.”



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