Elective Amputation
James Brooks, Biomedical Engineering, University of Rhode Island
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Abstract—As the rate at which biomedical prosthetics becomes more efficient and more life-like increases, how far should medical professionals be willing to go with elective amputations. When is the elective amputation situation ethical wrong?

I. INTRODUCTION
With the constant invention of new and improved prosthetics, those with defective limbs are opting into (more and more in comparison with previous years) removing their defective limbs and replacing them with technological alternatives.. In the future, if and when biomedical prosthetics surpass the functionality of the biological limb, will doctors start removing perfectly healthy, functioning limbs and replacing them with “limbs 2.0” or will said practice be unethical.

II. REASONS
With Amelia or other birth defects, some surgeons are willing to perform amputation (if needed) in order to have the defective limb replaced with a prosthetic that will be attached at a later date. Some babies, such as this one:

will grow up and decide that they no longer want to live with a limb that they can't do anything with and so will decide to proceed with the amputation surgery. Afterwards, a period of time is given in order for the patient to become accustomed to life after the removal of said limb before the prosthetic is then applied (either completely externally or with some part of implantation [with surgery] into the stump of what is left of the limb.

III. PROCEDURES
In modern day amputations, the main goal of the medical team is to perform an amputation that will leave the least amount of damage and will also be quick to heal after the surgery. Firstly, the skin is cut through with care as to where the incision is placed so that it is healed quickly. Next, the muscle (which is the majority of tissue to cut through) is cut below the amputation sight so that the muscle can surround the end of the amputated bone and provide support and cushion of the stump. Next, the nerves are cut into above the amputation site and are made to innervate the muscle above and at the amputation site so that they will send less pain signals after surgery and can be used later on in the fitting of a prosthetic. Finally, the bone is cut into and then the end is “sanded down” in order to remove any rough edges that might cause irritation or even damage to the stump.

IV. DISCUSSION
While amputation for serious medical conditions and situations is very useful at the current state of medicine and medical technology, it is believed that many ethical discussions will be had prior to as well as during the period where prosthetics begin to match and even outmatch normal human organic limbs. While some may feel that it is the choice of the patient, some surgeons may feel that the decision would be unethical to remove a fully functioning limb in order to replace it with a piece of technology that has surpassed what “Mother Nature” has given this patient.

While we have yet to come close to this situation, I believe that the technology will catch up with nature in less time than people imagine and that these conversations will need to occur as soon as possible in order to set down the procedure guidelines for these types of situations before they become an issue and before they come to the attention of society and the government and cause endless debate at a time when we need these guidelines established then and there.

REFERENCES