Instead of slides or a colorful CD, I invite you to use the most powerful instrument we have so far, the brain, and your imagination to visualize what I am going to share with you; the trip we are going to start will be enriched by your own creative capacity and your personal experiences.

You are expert laparoscopists; therefore we may imagine a video camera going not into the abdomen, but within the tunnel of history.

We go to the center of Africa 10,000-12,000 years ago, where you may see the green prairie on the Black continent, near the Olduay valley, among luxurious vegetation, where many animals live. On a rock, coarsely covered by tree branches, a human tribe lives. On the far end, a woman cuts the leg of a deer with a stone knife, and takes a piece to the fire. Two children play and yell among the indifference of the others. At the entrance of the cave, a squatting man tends his partner who was wounded in the last hunt and is unable to move. The buffalo they killed caused a deep wound in the thigh, and the leg does not move. A sharp tree branch penetrates the thigh and blood flows abundantly. The pale wounded man howls in pain, and cries at even slight movement. His partner tries to help without success.

After some time, light seems to illuminate his brain and he decides to extract the tree branch that pierced the leg. Blood keeps flowing, so he makes a rough tourniquet with wood and rope. He places two pieces of wood around the leg, and ties them carefully to immobilize the thigh. Soon after that, the wounded man smiles for the first time, and his partner, a nameless *paleosurgeon*, makes rough signs of friendship, touches him, caresses him, and cares for him.

Our video camera goes now to the North, to the deserted mountains of Algiers 5,000 years ago. There, in front of the *shaman* of the tribe, three men hold a young man shaking with convulsions, eyes wide open, foam pouring from his mouth; he seems to die. The *shaman*, calm in front of such a scene, knows, because he was taught by his masters, that evil spirits have entered that head and need to be liberated. He gives the young man a concoction, and he proceeds carefully to make a trephine in the skull, cuts the skin, and slowly files down the bone with a rough stone. Hours later, due to several interruptions as the patient suffers more convulsions and the *shaman-surgeon* pauses to invoke the gods, the operation ends, and the dura mater bulges from a 5-cm hole. The young man no longer has convulsions. He sleeps, and the *shaman-surgeon* recites some magic words, touches him, caresses him, and cares for him.

We move the video camera upward and to the right. The scene happens 4,000 years ago in a sumptuous palace in Mesopotamia, where two rivers transformed the desert into a paradise, inhabited by Babylonians and Assyrians. Hammurabi is the King, and we see him surrounded by ministers and advisers, physicians and sorcerers. For the first time, there is written documentation, made on clay tablets with cuneiform characters in which one
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may read: “diseases are a consequence of the sins of men and punishments from the gods”.

The Asu or physician, that works along and competes at the same time with the Āshipu or sorcerer, solemnly repeats a litany on the ways to cure a sick man, all three equally valid: “to cure with drugs”, “to make an operation with a tin knife”, or “to follow the prescriptions of the sorcerers”. He informs the king of the operation that he performed on one of his close advisers, who had fever, acute chest pain and a relentless cough, which blocked his breathing. After examining him he understood that an evil air had entered his lungs and he had fire inside. Therefore, after invoking the gods, he punctured the thorax right above the third lowest rib and a great amount of fetid fluid came out. The sick man has slowly recovered and the Asu comforted him with herbs and prayers; he will be near the king for few more days.

By the way, it is in the stele of Hammurabi, in clay number 215, where for the first time the word Naglabu appears: “surgeon’s knife”, which comes from the union of the symbol “barber” with the symbol for “knife” and the symbol “Asu”, “physician.”

We now move our video camera towards Greece, where many medical terms that we use everyday were born and skillful surgery was performed. If we want to learn about Greek medicine and surgery, and to see what the Iatrós or surgeon did, it would be good to read the poets. In the Iliad, 147 wounds and treatments are mentioned and many others in the Odyssey. Homer and Plutarch have a lot to show us in terms of Greek surgery. Besides, the name Cheirurgos (origin of surgeon, chirugien, cirujano, etc.) appears for the first time in the works of Plutarch, on the first Century before our era.

But let us continue our trip. Going with our camera to the Iatreion, the working place of the Iatros, as described by Hippocrates in “Surgery”, we may see that it is “clean, with two kinds of light, and equipped with surgical instruments, drugs, apparatus and even scrolls of medical literature; and the Iatrós is clean, spotless and even perfumed”.

And we see a youngster who comes with a slave who has a terrible cut in his face and his nose is almost severed. The Iatros washes the wound with white wine, and then pats it with a sponge and pieces of dry linen. “This is a sharp cut”, says the Iatrós, “I can make the wound close fast, without the formation of pus”. He takes a bronze needle, threads it, and carefully stitches the flesh and covers the suture with a mixture of copper oxide and honey. The dressing is a pad of cloth soaked with wine and a handful of leaves. Finally, he makes an artful bandage sewing it with thread and needle. “Now that your wound is sutured, we must prevent it from throwing pus. You have to purify your body, so take this potion”, and he gives him one of the 60 drugs called “cathartics”. “You also have to drink hydromel, little food and no cheese”. The Iatros touches him, caresses him, and cares for him.

Our journey continues for Centuries. Gods and supernatural powers dictate every human activity, and only some brave men and women try to search for the truth behind the wounds, diseases and death. The Schools of the followers of Asklepios, Hippocrates, Avicena, Maimónides, and many others are only islets of science in a wide and deep sea of ignorance.

We arrive with our video camera to the XVI Century. The occidental world springs up again, and at the time Adreas Vesalius publishes his monumental discovery of the human anatomy, a French surgeon, Ambroise Paré, initiates modern surgery. His anatomic knowledge and great common sense allows him to modify the current cruel surgical techniques. We see him in a tent, in the middle of a battle near Paris, as he amputates a leg, and substitutes the red-hot cautery that savagely burns the flesh, instead using ligatures to stop hemorrhage. We may see what wonderful results he has, and we understand why he was nominated Royal Surgeon, ratified successively by five Kings.

Thanks to Paré, surgeons no longer belong to the order of barbers, and now they have recognition and acceptance in the Medical Schools and society. Besides, Paré is known by the soldiers as the “merciful surgeon”, not only because his surgical skills avoid suffering to the wounded, but because in the middle of the battle, powder, fire and death, “early in the morning, before the sunrise, he runs to the tent in which wounded soldiers lay and takes care of them, consoling them, and carefully changing their dressings”. Physician, surgeon, philosopher and humanist, Ambroise Paré is since his day the paradigm of the modern surgeon.