Notable Grand Rounds
of the
Michael & Marian Ilitch
Department of Surgery

Wayne State University
School of Medicine

Detroit, Michigan, USA

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Anna Ledgerwood, MD,

LEGENDARY RECOLLECTIONS

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June 23, 2021

About Notable Grand Rounds

These assembled papers are edited transcripts of didactic lectures given by mainly senior residents, but also some distinguished attending and guests, at the Grand Rounds of the Michael and Marian Ilitch Department of Surgery at the Wayne State University School of Medicine.

Every week, approximately 50 faculty attending surgeons and surgical residents meet to conduct postmortems on cases that did not go well. That "Mortality and Morbidity" conference is followed immediately by Grand Rounds.

This collection is not intended as a scholarly journal, but in a significant way it is a peer reviewed publication by virtue of the fact that every presentation is examined in great detail by those 50 or so surgeons.

It serves to honor the presenters for their effort, to potentially serve as first draft for an article for submission to a medical journal, to let residents and potential residents see the high standard achieved by their peers and expected of them, and by no means least, to contribute to better patient care.

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Legendary Recollections

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June 23, 2021

The talk from which this paper was derived was delivered by Dr. Ledgerwood at the Wayne State University School of Medicine Surgical Grand Rounds on June 23, 2021.

It is a real pleasure to recognize one of the people who has been in our department a few years and to acknowledge some of his contributions and recount some of my experiences with Dr. Choichi Sugawa.

He came to Detroit from Japan in 1970 to study gastric physiology. He was only going to be here two years. It was very important that there be no children that might be American citizens! He spent his days in the Mullet Street surgery lab in the basement of the original medical school.

I met him there as a second year resident, when I was sentenced to the lab by Dr. Ron Krome, the chief administrative resident, who told me I would go to the lab for six months. (I didn't want to do that. I wanted to do pathology—that was the other choice for the second year resident, and this was for a six month period of time. And I would work with Dr. Abalu doing myocardial revascularization. I wasn't too excited about that either. But there I was.)

The Mullet Street lab was an interesting place. It was financed by the Detroit Research Corporation, the entity that billed for patient care. Of the money collected, 85% went back to the departments. The surgery department used the money to fund department expenses such as malpractice, travel, slides, and research.

There were about 10 tables there for animal work. There were four technicians, Dr. Sugawa had Rita, who really looked after him. Much of the work was done on dogs. We learned to pick the German shepherd and avoid the Collies because they didn't tolerate anesthesia very well. His first project was scoping the dogs to see the effect of histamine, aspirin, steroids, and alcohol on a standardized gastric ulcer that he created.

He did this by giving general anesthesia and performing a laparotomy and putting a half ml of 40% acetic acid into the wall to the antrum and the body of the stomach. This wasn't an easy project. There were 52 animals that he did this

on. He then scoped them and took photographs—at one hour, two days, five days, and then weekly. This was a pretty extensive project. There were five groups to which he gave the drug (histamine in beeswax) daily by injection. This wasn't real easy because on Saturday and Sunday he would be the one that would have to find transportation—the bus—to get to the Mullet Street lab in order to access the animals and give the injections, which the dogs weren't too happy with.

The other things he used were aspirin, steroids, alcohol and a control group. He then analyzed the healing of these ulcers. The antral ulcers healing was delayed by histamine, steroids and alcohol and the body ulcer was delayed by all four groups. His Japanese colleagues around the country and in Japan couldn't master the technique of this injection and all of their ulcers perforated. His first paper was published in *Gastrointestinal Endoscopy* in 1971. He'd only been here a year.

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Back in the 1970s the only way we could assess GI bleeding was with an upper GI or barium enema. You could not assess a mucosal lesion, so we could not diagnose Mallory-Weiss gastric erosions or varices unless you actually opened the stomach. Remember, also, we had no acid blockade, we could only neutralize. Residents today have never had the opportunity to order a sippy diet, which was an ounce of milk and an ounce of Maalox every other hour, at the bedside, no other food.

If you had a patient with a massive upper GI bleed, as I did one day, you would go to the OR, do a lap, clamp the duodenum, and get Dr. Sugawa to scope the patient. He would hopefully identify the source and you would avoid opening the entire stomach.

I vividly remember one day at the old Detroit General when he was scoping a patient. "I can't be sure! I can't be sure! I can't be sure!" he cried, to which I responded: "When you write the paper, just be sure it is in the category of 'I can't be sure!'" Well, he did write that paper and it was presented at the 1973 Central Surgical Association meeting in Toronto. The very first paper on that program was "Early endoscopy: A guide to therapy for acute upper GI bleeding." Members of program committees usually score the abstracts and the abstract with the highest score gets the number one place on the program. And that was his paper.

This was Central Surgical's 30th meeting. It was a vibrant organization. There were lots of attendees, including probably 10 or 15 members of the Wayne State Department and perhaps 20 from Henry Ford Hospital. His paper described his work with154 patients with upper GI bleed over 12 months. Eight of them were scoped in the OR. Causes of bleeding included gastritis due to alcohol, aspirin or sepsis (in 70 of them,) benign ulcer (42—don't you wish we saw that today?), Mallory-Weiss (16), varices (80), gastric tumor (8), esophagitis and colitis (5), and esophageal cancer (2). 57 patients or 38% had more than one lesion. 60% had a superficial lesion. Remember, these were people we could not assess prior to Dr. Sugawa's endoscopy.

There were a couple of other papers in that program. Yours truly presented one on massive thigh injuries with a vascular disruption and a vein graft. That was only five minutes without discussion. The other paper was from Dr. JC Rosenberg who was doing transplants at the time and he reported on a two- to three-year period of 113 renal transplants in a paper entitled "The value of the pre-transplant nephrectomy." He pointed out the value of doing a nephrectomy if the patient had infected urine with reflux, or higher renin levels with hypertension.

Dr. Lucas could not attend the 1973 Central Surgical meeting because he had agreed to be a presenter in Puerto Rico when they opened their trauma symposium. He had made that commit-

ment before the abstracts were submitted (and subsequently accepted) for the Central Surgical. I vividly recall the trip to Toronto from Windsor. Dr. Sugawa and I sat next to each other, practicing our presentations. He would give his then I would give mine. All the way to Toronto. It was rather important—I would challenge any of you to go to Japan and present your paper in Japanese!—because here he was going to present a paper in English and it was kind of important to him to get the pronunciation right.

There were probably over 500 attendees, and three of the 40 presentations were from Wayne State. And that was just the beginning, but remember this was really a highlight of the meeting. Nobody else had been able to assess upper GI bleeding like this.

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One patient in particular taught me that Dr. Sugawa really knew what he was doing. In June of 1972, a 34 year old gentleman came with nausea and vomiting for six months. Some hematemesis. The upper GI showed a wide duodenal sweep. ED showed eight small gastric erosions. The diagnosis was alcoholic gastritis.

Three years later, he returned. Dizzy, could not walk, red blood per rectum, nausea, vomiting and no hematemesis. He had some bad blood on the NG tube. A sigmoid was done, it was negative. Hemoglobin was 68. He got 3 units of blood. EGD showed 2 longitudinal erosions in the distal esophagus into the stomach plus some gastric erosions. Diagnosis: Mallory-Weiss and gastritis.

A year later he comes back. Dizzy, epigastric pain. He'd been drinking and ran out of his Maalox. Hemoglobin was 5.6 and rectal showed brown stool. Three or four months later he comes back. Hemoglobin's 4.8, he is dizzy, brown stool. We do an upper GI and a barium enema, both are normal. This is diagnosed as alcohol abuse and iron deficiency anemia but he comes back five or six months later with epigastric and right chest pain. He’s febrile and epigastrium amylase is elevated, hemoglobin 7.8. He's treated for pneumonia and pancreatitis.
The next year he's back, with blight red blood per rectum, three days. Dizzy, nausea, vomiting, and no blood on emesis. His hemoglobin is 3.5. EGD showed erosions. Dr. Sugawa, always very helpful, says "Probably lower GI bleed.” He got 6 units of paxil and was treated for DTs.

In April 1979 we see him again. He fell out while trying to get to the toilet. Had been taking Maalox for four years for his ulcers. He drank a pint of Mohawk vodka a day. Denied abdominal pain, nausea, hematemesis. Pressure's okay. He had some clots in his nasal gastric tube, but it irrigated clear. Hemoglobin 4.3, alcohol was elevated, liver function not bad.

On the first day gets eight units of blood and some paxils. He has two bloody bowel movements. EGD shows gastric erosions in the proximal stomach—probable cause of bleeding in lower GI tract. Hemoglobin's at 11 now. He's got more bloody stools the next day. He gets a barium enema. It looks pretty good to us. You don't see a lot of diverticular disease. But he's got more bloody stools. Gets three more units of blood. He gets a laparotomy—finally, you might say. Stomach, duodenum, small bowel all normal, colon filled with blood, large mass in the tail of the pancreas with the colon adherent but it could be separated. Colon was intact. He has an ileorectal sigmoid anastomosis. Path showed three adenomatous polyps in secum. No bleeding site seen. Post-op, no more bleeding. We talked to him about treating him for the pseudocyst but he refused. This appeared to be a pseudocyst in the tail of the pancreas. He goes home with the hemoglobin at 10.4. No further bleeding.

We see him back a month later. Burgundy stools, no alcohol, he hadn't been drinking. Hemoglobin was 6. Coffee grounds irrigate clear. He gets 6 units of blood. Colonoscopy revealed bloody fluid

at 100 centimeters, no source of bleeding. Day three: Has a big black stool with red blood. Dr. Sugawa scopes him, and with all the excitement in the world, announces: “There is blood coming out of the ampulla.” I said: "This guy is good! To see blood coming out of the ampulla vater!” And indeed it was. An arteriogram revealed an aneurysm that's probably feeding the pseudocyst.

We didn't stop there: We got an ERCP which showed the outlining of the contrast from the ERCP in his pseudocyst. You could see a white/yellow area at the edge of the pancreas. In the center, it looked like there was a little opening with a blood tinge. And indeed there was, in the cavity above it. We could see the splenic artery into the pseudocyst draining down the ampulla vater. All that certainly did help the patient. The duct was cannulated with the probe, showing how it came down the duct. He did well after this. Went home, no further bleeding.

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My final recollections are of Thanksgiving, marbles, paying to publish, and tennis.

Thanksgiving: Knowing that Dr. Sugawa and his family were new to this country and probably didn't know much about the American Thanksgiving, Dr. and Mrs. Walt invited them to their home on Thanksgiving the first year he was here in 1970. Dr. Sugawa comes to me in the lab and is asking me to help with the thank you note he's trying to write to Dr. & Mrs. Walt thanking them for Thanksgiving dinner. Remember, he's speaking and writing in Japanese a majority of the time and needed a little help with the English interpretation, which I was happy to do. The point being: Be kind to colleagues who are here from another country and look after them as Dr. Walt did.

Marbles: One day I see Dr. Sugawa coming into work with a bag of marbles. "What are the marbles for?" "I'm practicing picking them up." Here is someone trying to develop the skills of picking up round objects out of the stomach or the duodenum so that he could do it without crushing them. Remember: Keep honing your skills, keep practicing.

Paying to publish: Now, this wasn't long ago. I'm in my office. Dr. Sugawa is standing next to Miss Debbie Waring's desk. And I hear this commotion: "They want me to pay? They need me to *pay?!*” So I come out and I ask: "What is the problem?" "They want me to *pay* to publish this!" You will get intermittently, particularly someone who has done as much publication as Dr. Sugawa has, emails from various journals, saying: "We've read your such and such. We would like you to submit an article to us on such and such." So Dr. Sugawa complies and writes a manuscript and it's edited and he's getting down with Miss Waring to the very fine details on submitting the manuscript. That’s when he noticed the item of the credit card, where he's being asked to pay to have the article published. This was entirely foreign to him.

Tennis: Dr. Sugawa plays tennis with a group of other Japanese physicians. He's very fortunate. He gets to play with the number one player. And the reason he gets to play with the number one player is that he's the number 20 player on the team, but he is there, actively involved. Lesson: Keep maintaining your physical activity.

Dr. Sugawa, thank you.