

WEBVTT Kind: captions Language: en

00:00:00.000 --> 00:00:02.800 [♪ slow music ♪]

00:00:07.933 --> 00:00:11.666 Kidney stones are a common disease process in the United States.

00:00:11.667 --> 00:00:13.633 Ten percent of Americans will get a kidney stone.

00:00:14.167 --> 00:00:17.399 When patients come to the emergency room or come to the urologist's office

00:00:17.400 --> 00:00:18.366 and they're having pain

00:00:18.367 --> 00:00:20.266 and there's a suspicion of kidney stones,

00:00:20.267 --> 00:00:24.000 majority of the time the diagnosis is made by getting a standard CT scan.

00:00:26.033 --> 00:00:27.199 Patients who have a kidney stone

00:00:27.200 --> 00:00:29.633 have a 50 percent chance of getting that stone again.

00:00:30.333 --> 00:00:33.232 It's often the case that kidney stone patients

00:00:33.233 --> 00:00:35.266 are getting many CAT scans

00:00:35.267 --> 00:00:36.900 in the many years of their lives.

00:00:37.500 --> 00:00:41.833 That CAT scan on average runs around 12 millisieverts.

00:00:48.033 --> 00:00:52.066 The radiation exposure is not something that you get

00:00:52.067 --> 00:00:54.332 and it washes out of your system.

00:00:54.333 --> 00:00:56.799 Radiation exposure is a cumulative thing.

00:00:56.800 --> 00:00:58.866 So, the more CAT scans,

00:00:58.867 --> 00:01:00.566 the more radiation exposure you get,

00:01:00.567 --> 00:01:01.667 can be very harmful,

00:01:04.267 --> 00:01:06.667 including developing cancers.

00:01:07.500 --> 00:01:10.066 Most of my work now is clinical research.

00:01:10.067 --> 00:01:13.533 How can we better understand how to treat certain patients?

00:01:14.400 --> 00:01:16.366 Our group recently proved

00:01:16.367 --> 00:01:19.432 that we were able to identify those patients

00:01:19.433 --> 00:01:20.799 who had kidney stones

00:01:20.800 --> 00:01:23.299 by exposing them to a type of CAT scan
00:01:23.300 --> 00:01:26.666 that has a very low dose of radiation exposure.
00:01:26.667 --> 00:01:30.700 We're reducing the radiation exposure by about
87 percent.
00:01:36.300 --> 00:01:37.299 Our hope is that
00:01:37.300 --> 00:01:39.032 disseminating this information,
00:01:39.033 --> 00:01:42.532 publishing and informing other clinicians about
it,
00:01:42.533 --> 00:01:45.199 this will become more widely used.
00:01:45.200 --> 00:01:48.933 It's an area where research became part of every-
day practice.
00:01:50.233 --> 00:01:51.232 This is what it's about.
00:01:51.233 --> 00:01:52.499 It's not about staying in place,
00:01:52.500 --> 00:01:53.832 it's about moving forward.
00:01:53.833 --> 00:01:55.232 It's about making things better.
00:01:55.233 --> 00:01:57.699 It's about making our understanding of medicine
better.
00:01:57.700 --> 00:01:59.966 It's about making the patients' lives better
00:01:59.967 --> 00:02:01.699 by applying some of those techniques
00:02:01.700 --> 00:02:04.966 or those new drugs or those new technologies
00:02:04.967 --> 00:02:06.833 to improve patients' lives.