WEBVTT

00:00:00.000 --> 00:00:02.148 Funding for Yale Cancer Answers is

NOTE Confidence: 0.796617770909091

00:00:02.148 --> 00:00:04.180 provided by Smilow Cancer Hospital.

NOTE Confidence: 0.716058278888889

00:00:06.580 --> 00:00:08.780 Welcome to Yale Cancer Answers

NOTE Confidence: 0.716058278888889

00:00:08.780 --> 00:00:10.540 with Doctor Anees Chagpar.

NOTE Confidence: 0.716058278888889

00:00:10.540 --> 00:00:12.345 Yale Cancer answers features the

NOTE Confidence: 0.716058278888889

00:00:12.345 --> 00:00:13.789 latest information on cancer

NOTE Confidence: 0.716058278888889

00:00:13.789 --> 00:00:15.627 care by welcoming oncologists and

NOTE Confidence: 0.716058278888889

00:00:15.627 --> 00:00:17.757 specialists who are on the forefront

NOTE Confidence: 0.716058278888889

00:00:17.818 --> 00:00:19.456 of the battle to fight cancer.

NOTE Confidence: 0.716058278888889

00:00:19.460 --> 00:00:21.656 This week, it's a conversation about

NOTE Confidence: 0.716058278888889

00:00:21.656 --> 00:00:23.800 childhood cancer with Doctor Mary Jane Hogan.

NOTE Confidence: 0.716058278888889

00:00:23.800 --> 00:00:26.369 Dr Hogan is an associate professor of

NOTE Confidence: 0.716058278888889

00:00:26.369 --> 00:00:27.914 clinical Pediatrics and hematology

NOTE Confidence: 0.716058278888889

00:00:27.914 --> 00:00:30.595 oncology at the Yale School of Medicine,

NOTE Confidence: 0.716058278888889

00:00:30.600 --> 00:00:32.778 where Doctor Chagpar is a professor

NOTE Confidence: 0.716058278888889

00:00:32.778 --> 00:00:33.867 of surgical oncology.

NOTE Confidence: 0.8857028935

00:00:35.130 --> 00:00:36.859 So, Doctor Hogan, maybe we can start

NOTE Confidence: 0.8857028935

00:00:36.859 --> 00:00:39.294 off by you telling us a little bit more

NOTE Confidence: 0.8857028935

00:00:39.294 --> 00:00:41.130 about yourself and what it is you do.

NOTE Confidence: 0.853194514285714

00:00:41.410 --> 00:00:44.812 Sure. I am currently working in

NOTE Confidence: 0.853194514285714

00:00:44.812 --> 00:00:48.167 our Smilow cancer clinic in New Haven,

NOTE Confidence: 0.853194514285714

00:00:48.170 --> 00:00:50.294 as well as our clinics located

NOTE Confidence: 0.853194514285714

00:00:50.294 --> 00:00:54.050 in Trumbull and Greenwich, CT.

NOTE Confidence: 0.853194514285714

00:00:54.050 --> 00:00:58.127 I've come by way of a lot of different

NOTE Confidence: 0.853194514285714

00:00:58.130 --> 00:01:02.729 avenues. My research initially has focused on

NOTE Confidence: 0.853194514285714

00:01:02.730 --> 00:01:04.902 treating brain tumors in

NOTE Confidence: 0.853194514285714

00:01:04.902 --> 00:01:07.074 mice in the laboratory,

NOTE Confidence: 0.853194514285714

00:01:07.080 --> 00:01:10.482 but more recently have done more research

NOTE Confidence: 0.853194514285714

00:01:10.482 --> 00:01:13.619 in childhood cancer survivorship issues.

NOTE Confidence: 0.853194514285714

00:01:13.620 --> 00:01:17.310 And currently am also doing

NOTE Confidence: 0.853194514285714

00:01:17.310 --> 00:01:19.494 the clinical education issues

NOTE Confidence: 0.853194514285714

00:01:19.494 --> 00:01:21.678 for colleagues and trainees,

NOTE Confidence: 0.853194514285714

00:01:21.680 --> 00:01:24.626 as well as helping families and

NOTE Confidence: 0.853194514285714

00:01:24.626 --> 00:01:27.250 patients with learning about cancer.

NOTE Confidence: 0.806416672

00:01:28.230 --> 00:01:31.010 Terrific, NOTE Confidence: 0.806416672

00:01:31.010 --> 00:01:33.030 we're talking here about childhood

NOTE Confidence: 0.806416672

00:01:33.030 --> 00:01:35.050 cancers and that's something that

NOTE Confidence: 0.806416672

00:01:35.119 --> 00:01:37.559 everyone always finds really distressing,

NOTE Confidence: 0.806416672

00:01:37.560 --> 00:01:40.444 the fact that children can get cancer.

NOTE Confidence: 0.806416672

00:01:40.450 --> 00:01:43.190 So can you tell us a little bit more about

NOTE Confidence: 0.806416672

00:01:43.264 --> 00:01:45.749 the epidemiology of childhood cancers?

NOTE Confidence: 0.806416672

00:01:45.750 --> 00:01:48.954 I mean, how many children in the US get

NOTE Confidence: 0.806416672

00:01:48.954 --> 00:01:51.430 diagnosed with cancer every year and

NOTE Confidence: 0.806416672

00:01:51.430 --> 00:01:54.579 how common is it and what kinds of

NOTE Confidence: 0.806416672

00:01:54.579 --> 00:01:58.390 cancers are we talking about here?

NOTE Confidence: 0.77928621

00:01:58.390 --> 00:02:02.035 Well, childhood cancers are more

NOTE Confidence: 0.77928621

00:02:02.035 --> 00:02:05.680 rare compared to adult cancers.

NOTE Confidence: 0.77928621

00:02:05.680 --> 00:02:07.484 There are approximately 2,000,000

NOTE Confidence: 0.77928621

00:02:07.484 --> 00:02:09.739 adults every year diagnosed with

NOTE Confidence: 0.77928621

00:02:09.739 --> 00:02:11.560 cancer in the United States,

NOTE Confidence: 0.77928621

00:02:11.560 --> 00:02:14.056 and this is compared to about

NOTE Confidence: 0.77928621

00:02:14.060 --> 00:02:17.558 15,000 children and teens in the

NOTE Confidence: 0.77928621

00:02:17.558 --> 00:02:20.460 United States diagnosed every year.

NOTE Confidence: 0.77928621

00:02:20.460 --> 00:02:23.477 And cancer, I'll just sort of describe

NOTE Confidence: 0.77928621

00:02:23.477 --> 00:02:26.735 it a little bit here, is an abnormal

NOTE Confidence: 0.77928621

00:02:26.735 --> 00:02:29.500 increase in cells in the body of

NOTE Confidence: 0.77928621

00:02:29.589 --> 00:02:31.899 abnormal cells that don't function

NOTE Confidence: 0.77928621

00:02:31.899 --> 00:02:35.562 or don't work in the body and they

NOTE Confidence: 0.77928621

00:02:35.562 --> 00:02:38.082 take up space and this doesn't

NOTE Confidence: 0.77928621

00:02:38.082 --> 00:02:41.185 allow the regular body organs to

NOTE Confidence: 0.77928621

00:02:41.185 --> 00:02:45.200 do their job and keep us healthy.

NOTE Confidence: 0.77928621

00:02:45.200 --> 00:02:50.149 And so the most common cancers in children

NOTE Confidence: 0.77928621

00:02:50.150 --> 00:02:51.766 are leukemia,

NOTE Confidence: 0.77928621

00:02:51.766 --> 00:02:53.786 and this is an abnormal

NOTE Confidence: 0.77928621

00:02:53.786 --> 00:02:55.749 accumulation of white blood cells.

NOTE Confidence: 0.77928621

00:02:55.750 --> 00:02:57.790 White blood cells typically fight infection,

NOTE Confidence: 0.77928621

00:02:57.790 --> 00:03:00.460 but in leukemias

NOTE Confidence: 0.77928621

00:03:00.460 --> 00:03:03.260 they just take up space and so

NOTE Confidence: 0.77928621

00:03:03.260 --> 00:03:05.160 that you cannot fight infection.

NOTE Confidence: 0.77928621

00:03:05.160 --> 00:03:06.984 The second most common type of

NOTE Confidence: 0.77928621

00:03:06.984 --> 00:03:09.009 cancer in children are brain tumors.

NOTE Confidence: 0.77928621

00:03:09.010 --> 00:03:11.710 This is where there's an abnormal

NOTE Confidence: 0.77928621

00:03:11.710 --> 00:03:14.878 growth or mass in the brain.

NOTE Confidence: 0.77928621

00:03:14.880 --> 00:03:17.436 The third most common are lymphomas.

NOTE Confidence: 0.77928621

00:03:17.440 --> 00:03:20.257 This is a cancer found in the lymph nodes,

NOTE Confidence: 0.77928621

00:03:20.260 --> 00:03:21.940 which are glands located throughout

NOTE Confidence: 0.77928621

00:03:21.940 --> 00:03:26.210 our body that help us fight infection.

NOTE Confidence: 0.77928621

00:03:26.210 --> 00:03:29.167 And then the remaining cancers involve

NOTE Confidence: 0.77928621

00:03:29.167 --> 00:03:30.829 the soft tissues of the body,

NOTE Confidence: 0.77928621

00:03:30.830 --> 00:03:33.278 such as the muscles or the

NOTE Confidence: 0.77928621

00:03:33.278 --> 00:03:35.430 various organs of the body,

NOTE Confidence: 0.77928621

00:03:35.430 --> 00:03:39.567 including the nerves outside the brain or

NOTE Confidence: 0.77928621

00:03:39.567 --> 00:03:45.058 the kidney or the bone anywhere in the body.

NOTE Confidence: 0.77928621

00:03:49.440 --> 00:03:50.194 So it's very rare

00:03:50.571 --> 00:03:52.079 compared to adult cancer,

NOTE Confidence: 0.77928621

00:03:52.080 --> 00:03:55.030 but still obviously very important.

00:03:56.606 --> 00:03:59.396 When we think about adult cancers,

NOTE Confidence: 0.758842435285714

00:03:59.396 --> 00:04:02.136 very often there's an exposure.

NOTE Confidence: 0.758842435285714

00:04:02.140 --> 00:04:04.462 So for example, in lung cancer

NOTE Confidence: 0.758842435285714

00:04:04.462 --> 00:04:07.519 we know that there is a great

NOTE Confidence: 0.758842435285714

00:04:07.519 --> 00:04:09.415 association with cigarette smoking

NOTE Confidence: 0.758842435285714

00:04:09.415 --> 00:04:12.244 or any smoking really. In Melanoma,

NOTE Confidence: 0.758842435285714

00:04:12.244 --> 00:04:14.776 we know that there's an exposure

NOTE Confidence: 0.758842435285714

00:04:14.780 --> 00:04:17.090 to radiation often from the

NOTE Confidence: 0.758842435285714

00:04:17.090 --> 00:04:19.400 sun that occurs.

NOTE Confidence: 0.758842435285714

00:04:19.400 --> 00:04:20.190 For children,

NOTE Confidence: 0.758842435285714

00:04:20.190 --> 00:04:22.165 one would anticipate just

NOTE Confidence: 0.758842435285714

00:04:22.165 --> 00:04:24.416 because they are children that

NOTE Confidence: 0.758842435285714

00:04:24.416 --> 00:04:26.916 they've had less exposures to

NOTE Confidence: 0.758842435285714

00:04:26.916 --> 00:04:28.416 potential carcinogens.

NOTE Confidence: 0.758842435285714

00:04:28.420 --> 00:04:30.562 So can you talk a little bit

NOTE Confidence: 0.758842435285714

00:04:30.562 --> 00:04:33.192 more about the risk factors for

NOTE Confidence: 0.758842435285714

00:04:33.192 --> 00:04:34.830 developing childhood cancers?

NOTE Confidence: 0.758842435285714

00:04:34.830 --> 00:04:37.098 Are many of these genetic or are

NOTE Confidence: 0.758842435285714

00:04:37.098 --> 00:04:39.103 there other things that predispose

NOTE Confidence: 0.758842435285714

00:04:39.103 --> 00:04:41.035 some children to developing

NOTE Confidence: 0.758842435285714

00:04:41.035 --> 00:04:42.967 childhood cancers versus others?

NOTE Confidence: 0.75191749375

00:04:44.000 --> 00:04:46.488 Overall, most causes of

NOTE Confidence: 0.75191749375

00:04:46.488 --> 00:04:48.976 childhood cancer are unknown.

NOTE Confidence: 0.75191749375

00:04:48.980 --> 00:04:51.708 We have learned over the past 50 years

NOTE Confidence: 0.75191749375

00:04:51.710 --> 00:04:57.299 though, that about 5 to 10% may be inherited.

NOTE Confidence: 0.75191749375

00:04:57.300 --> 00:05:01.512 There are about 50 cancer predisposition

NOTE Confidence: 0.75191749375

00:05:01.512 --> 00:05:06.141 syndromes that we call based on genetic

NOTE Confidence: 0.75191749375

00:05:06.141 --> 00:05:09.783 mutations that a child may inherit.

NOTE Confidence: 0.75191749375

00:05:09.790 --> 00:05:11.694 Passed on through the

NOTE Confidence: 0.75191749375

00:05:11.694 --> 00:05:14.770 family or are born with.

NOTE Confidence: 0.75191749375

00:05:14.770 --> 00:05:17.815 In which there are many other symptoms.

NOTE Confidence: 0.75191749375

00:05:17.820 --> 00:05:20.308 So when we discover a condition like this,

NOTE Confidence: 0.75191749375

00:05:20.310 --> 00:05:24.240 we recommend looking at the child

NOTE Confidence: 0.75191749375

00:05:24.240 --> 00:05:28.040 every couple of months to years,

NOTE Confidence: 0.75191749375

00:05:28.040 --> 00:05:30.288 looking for cancer itself.

NOTE Confidence: 0.75191749375

00:05:30.288 --> 00:05:32.536 Some cancers have been

NOTE Confidence: 0.75191749375

00:05:32.536 --> 00:05:34.959 associated with viral illness.

NOTE Confidence: 0.75191749375

00:05:34.960 --> 00:05:37.795 Epstein Barr virus has been

NOTE Confidence: 0.75191749375

00:05:37.795 --> 00:05:40.063 associated with lymphomas.

NOTE Confidence: 0.75191749375

00:05:40.070 --> 00:05:42.882 HIV has been associated

NOTE Confidence: 0.75191749375

00:05:42.882 --> 00:05:45.694 with certain cancers and people

NOTE Confidence: 0.75191749375

00:05:45.700 --> 00:05:48.276 might have heard of human papillomavirus,

NOTE Confidence: 0.75191749375

00:05:48.280 --> 00:05:51.304 which we are now giving vaccines

NOTE Confidence: 0.75191749375

00:05:51.304 --> 00:05:54.842 in the teenage years to people to

NOTE Confidence: 0.75191749375

00:05:54.842 --> 00:06:01.140 prevent several cancers in adulthood.

NOTE Confidence: 0.75191749375

00:06:01.140 --> 00:06:05.900 A parent who has been exposed to

NOTE Confidence: 0.75191749375

00:06:05.900 --> 00:06:08.575 radiation while the child is in the womb.

NOTE Confidence: 0.75191749375

00:06:08.580 --> 00:06:11.359 The child may be affected with cancer.

NOTE Confidence: 0.75191749375

00:06:11.360 --> 00:06:12.920 There have been some reports,

NOTE Confidence: 0.75191749375

00:06:12.920 --> 00:06:15.032 possibly of pesticides during

NOTE Confidence: 0.75191749375

00:06:15.032 --> 00:06:19.268 exposure while in the womb or as a

NOTE Confidence: 0.75191749375

00:06:19.268 --> 00:06:21.698 very young child causing cancers.

NOTE Confidence: 0.75191749375

00:06:21.700 --> 00:06:25.280 These are not directly effective,

NOTE Confidence: 0.75191749375

00:06:25.280 --> 00:06:28.130 but there have been several reports.

NOTE Confidence: 0.75191749375

00:06:28.130 --> 00:06:31.034 And in our children who have

NOTE Confidence: 0.75191749375

00:06:31.034 --> 00:06:32.486 had previous cancers,

NOTE Confidence: 0.75191749375

00:06:32.490 --> 00:06:35.647 they are at an increased risk of

NOTE Confidence: 0.75191749375

00:06:35.647 --> 00:06:39.134 having cancer because of either their

NOTE Confidence: 0.75191749375

00:06:39.134 --> 00:06:42.364 genetic predisposition or they've been

NOTE Confidence: 0.75191749375

00:06:42.364 --> 00:06:45.690 exposed to certain treatments

NOTE Confidence: 0.75191749375

00:06:45.690 --> 00:06:48.126 that can increase risk of cancer.

NOTE Confidence: 0.75191749375

00:06:48.130 --> 00:06:49.885 But in general,

NOTE Confidence: 0.75191749375

00:06:49.885 --> 00:06:52.225 most causes are unknown.

NOTE Confidence: 0.75191749375

00:06:52.230 --> 00:06:55.488 Cancer is not something

NOTE Confidence: 0.75191749375

00:06:55.488 --> 00:06:57.117 that is contagious.

NOTE Confidence: 0.75191749375

00:06:57.120 --> 00:07:01.474 And it's not something necessarily that you

NOTE Confidence: 0.75191749375

00:07:01.480 --> 00:07:05.633 can avoid or something that

NOTE Confidence: 0.75191749375

00:07:05.633 --> 00:07:08.784 you've done to yourself necessarily so

NOTE Confidence: 0.75191749375

00:07:08.784 --> 00:07:13.520 nobody is really to blame for the cancer.

00:07:14.400 --> 00:07:16.710 When you think about

NOTE Confidence: 0.9026704825

00:07:16.710 --> 00:07:18.582 most causes being unknown and

NOTE Confidence: 0.9026704825

00:07:18.582 --> 00:07:20.674 only about 5 to 10% being genetic,

NOTE Confidence: 0.9026704825

00:07:20.674 --> 00:07:22.996 and then the other etiologic factors

NOTE Confidence: 0.9026704825

00:07:22.996 --> 00:07:26.099 that we know about,

NOTE Confidence: 0.9026704825

00:07:26.099 --> 00:07:28.664 viral infections and intrauterine

NOTE Confidence: 0.9026704825

00:07:28.664 --> 00:07:31.779 exposures to various toxins and so on,

NOTE Confidence: 0.9026704825

00:07:31.780 --> 00:07:33.810 which one would presumably think

NOTE Confidence: 0.9026704825

00:07:33.810 --> 00:07:36.357 would be a fairly small proportion

NOTE Confidence: 0.9026704825

00:07:36.357 --> 00:07:39.009 that leaves the vast majority to

NOTE Confidence: 0.9026704825

00:07:39.009 --> 00:07:41.664 be something that is not something

NOTE Confidence: 0.9026704825

00:07:41.664 --> 00:07:43.749 that you can even anticipate.

NOTE Confidence: 0.9026704825

00:07:43.750 --> 00:07:48.650 Given if you're a

NOTE Confidence: 0.9026704825

00:07:48.781 --> 00:07:53.685 new parent and you have a healthy child,

NOTE Confidence: 0.9026704825

00:07:53.690 --> 00:07:55.922 you're not really expecting

NOTE Confidence: 0.9026704825

00:07:55.922 --> 00:07:58.439 that that child will develop cancer.

NOTE Confidence: 0.9026704825

00:07:58.440 --> 00:08:00.632 Can you tell us a little bit more

NOTE Confidence: 0.9026704825

00:08:00.632 --> 00:08:02.488 about some of the side effects,

NOTE Confidence: 0.9026704825

00:08:02.490 --> 00:08:04.905 some of the symptoms that you

NOTE Confidence: 0.9026704825

00:08:04.905 --> 00:08:07.265 should be looking for that might tip

NOTE Confidence: 0.9026704825

00:08:07.265 --> 00:08:09.582 you off that there might be something

NOTE Confidence: 0.9026704825

00:08:09.582 --> 00:08:11.844 wrong that might be a cancer?

NOTE Confidence: 0.9026704825

00:08:11.850 --> 00:08:13.906 Is there a way that we can diagnose

NOTE Confidence: 0.9026704825

00:08:13.906 --> 00:08:14.420 these early?

NOTE Confidence: 0.779967955555555

00:08:15.810 --> 00:08:19.045 It's very difficult to diagnose

NOTE Confidence: 0.779967955555555

00:08:19.045 --> 00:08:21.633 cancers early in children.

NOTE Confidence: 0.779967955555555

00:08:21.640 --> 00:08:23.775 You'd need a sizable amount of these

NOTE Confidence: 0.779967955555555

00:08:23.775 --> 00:08:25.377 abnormal cells to actually show

NOTE Confidence: 0.779967955555555

00:08:25.377 --> 00:08:27.865 themselves and to show a sign or symptom.

NOTE Confidence: 0.941908941428571

00:08:30.310 --> 00:08:32.347 Please note that I will describe a

NOTE Confidence: 0.941908941428571

00:08:32.347 --> 00:08:34.570 whole long list of signs and symptoms,

NOTE Confidence: 0.941908941428571

00:08:34.570 --> 00:08:36.400 but typically children present with

NOTE Confidence: 0.941908941428571

00:08:36.400 --> 00:08:38.230 a combination of these symptoms.

NOTE Confidence: 0.941908941428571

00:08:38.230 --> 00:08:41.527 So not just one symptom means cancer.

NOTE Confidence: 0.941908941428571

00:08:41.530 --> 00:08:42.946 There's a combination,

NOTE Confidence: 0.941908941428571

00:08:42.946 --> 00:08:45.778 and often the symptoms that people

NOTE Confidence: 0.941908941428571

00:08:45.778 --> 00:08:48.022 present with, our children present

NOTE Confidence: 0.941908941428571

00:08:48.022 --> 00:08:50.838 with and grownups too,

NOTE Confidence: 0.941908941428571

00:08:50.838 --> 00:08:54.890 the signs are persistent.

NOTE Confidence: 0.941908941428571

00:08:54.890 --> 00:08:57.094 And they worsen over time

NOTE Confidence: 0.941908941428571

00:08:57.094 --> 00:08:59.849 and they typically can't be

NOTE Confidence: 0.941908941428571

00:08:59.849 --> 00:09:02.545 explained by an infection or an

NOTE Confidence: 0.941908941428571

00:09:02.545 --> 00:09:05.040 injury that the child has had.

NOTE Confidence: 0.941908941428571

00:09:05.040 --> 00:09:07.420 So it's mostly unexplained

NOTE Confidence: 0.941908941428571

00:09:07.420 --> 00:09:09.800 but worsening of symptoms.

NOTE Confidence: 0.941908941428571

00:09:09.800 --> 00:09:12.936 And there's a long list of symptoms,

NOTE Confidence: 0.941908941428571

00:09:12.940 --> 00:09:14.443 unexplained weight loss.

NOTE Confidence: 0.941908941428571

00:09:14.443 --> 00:09:17.950 So not that the child's not eating

NOTE Confidence: 0.941908941428571

00:09:18.036 --> 00:09:22.570 enough or losing weight from too

NOTE Confidence: 0.941908941428571

00:09:22.570 --> 00:09:24.910 much exercise and so not eating

NOTE Confidence: 0.941908941428571

00:09:24.910 --> 00:09:26.005 enough,

NOTE Confidence: 0.941908941428571

00:09:26.005 --> 00:09:28.560 it's weight loss that you can't explain.

NOTE Confidence: 0.941908941428571

00:09:28.560 --> 00:09:29.793 They're eating fine.

NOTE Confidence: 0.941908941428571

00:09:29.793 --> 00:09:31.848 Fevers that you can't explain

NOTE Confidence: 0.941908941428571

00:09:31.848 --> 00:09:33.459 that persist and worsen.

NOTE Confidence: 0.941908941428571

00:09:33.460 --> 00:09:36.116 Not from a simple infection or

NOTE Confidence: 0.941908941428571

00:09:36.116 --> 00:09:37.780 even a complicated infection,

NOTE Confidence: 0.941908941428571

00:09:37.780 --> 00:09:40.279 but fevers that just cannot be explained.

NOTE Confidence: 0.941908941428571

00:09:40.280 --> 00:09:41.026 Night sweats,

NOTE Confidence: 0.941908941428571

00:09:41.026 --> 00:09:43.637 not getting a little damp at night,

NOTE Confidence: 0.941908941428571

00:09:43.640 --> 00:09:46.118 but if your T-shirt and bedding and

NOTE Confidence: 0.941908941428571

00:09:46.118 --> 00:09:48.559 pillow and hair are soaked and you

NOTE Confidence: 0.941908941428571

00:09:48.559 --> 00:09:50.940 have to change it and you're like,

NOTE Confidence: 0.941908941428571

00:09:50.940 --> 00:09:52.936 where did this come from? I'm not even warm.

NOTE Confidence: 0.941908941428571

00:09:52.936 --> 00:09:54.640 I don't even have a fever.

NOTE Confidence: 0.941908941428571

00:09:54.640 --> 00:09:57.796 What is going on? Headaches.

NOTE Confidence: 0.941908941428571

00:09:57.796 --> 00:10:00.126 Headaches are a common sign.

00:10:00.608 --> 00:10:04.910 The headaches are common for a lot of people,

NOTE Confidence: 0.941908941428571

00:10:04.910 --> 00:10:08.302 but the ones that are more worrisome

NOTE Confidence: 0.941908941428571

00:10:08.302 --> 00:10:11.010 usually occur in the early morning,

NOTE Confidence: 0.941908941428571

00:10:11.010 --> 00:10:13.142 are associated with vomiting,

NOTE Confidence: 0.941908941428571

00:10:13.142 --> 00:10:15.807 sometimes awaken you at night,

NOTE Confidence: 0.941908941428571

00:10:15.810 --> 00:10:19.450 and they don't respond to Tylenol or

NOTE Confidence: 0.941908941428571

00:10:19.450 --> 00:10:22.210 ibuprofen or simple remedies that

NOTE Confidence: 0.941908941428571

00:10:22.210 --> 00:10:24.370 we use for headaches or hydration.

00:10:26.400 --> 00:10:31.333 If a parent notices swelling or pain in

NOTE Confidence: 0.941908941428571

00:10:31.333 --> 00:10:35.519 arms or legs or at the back of a child,

NOTE Confidence: 0.941908941428571

00:10:35.520 --> 00:10:39.956 if you notice a mass in the neck or in

NOTE Confidence: 0.941908941428571

00:10:39.956 --> 00:10:43.916 the armpits or in the abdomen or pelvis,

NOTE Confidence: 0.941908941428571

00:10:43.920 --> 00:10:47.200 that's just sticking out,

NOTE Confidence: 0.941908941428571

00:10:47.200 --> 00:10:50.245 that can be a sign of cancer if

NOTE Confidence: 0.941908941428571

00:10:50.245 --> 00:10:52.315 they're in combination with all these

NOTE Confidence: 0.941908941428571

00:10:52.315 --> 00:10:54.442 other signs and symptoms. If there's

NOTE Confidence: 0.941908941428571

00:10:54.442 --> 00:10:56.494 a lot of bruising or bleeding.

NOTE Confidence: 0.941908941428571

00:10:56.500 --> 00:11:00.382 Or rash that just doesn't go

NOTE Confidence: 0.941908941428571

00:11:00.382 --> 00:11:02.970 away with simple interventions.

NOTE Confidence: 0.941908941428571

00:11:02.970 --> 00:11:07.162 If somebody seems very pale and

NOTE Confidence: 0.941908941428571

00:11:07.162 --> 00:11:11.194 it worsens overtime or is tired

NOTE Confidence: 0.941908941428571

00:11:11.194 --> 00:11:14.910 not explained by

NOTE Confidence: 0.941908941428571

00:11:14.910 --> 00:11:18.694 only sleeping for five hours a night or

NOTE Confidence: 0.941908941428571

00:11:18.700 --> 00:11:24.466 being tired without really knowing why.

NOTE Confidence: 0.941908941428571

00:11:24.470 --> 00:11:27.230 If anybody has any vision changes

NOTE Confidence: 0.941908941428571

00:11:27.230 --> 00:11:29.150 that's not explained or corrected

NOTE Confidence: 0.941908941428571

00:11:29.150 --> 00:11:32.910 with simple glasses, NOTE Confidence: 0.941908941428571

00:11:32.910 --> 00:11:34.830 these in combination,

NOTE Confidence: 0.941908941428571

00:11:34.830 --> 00:11:38.508 along with a good physical exam

NOTE Confidence: 0.941908941428571

00:11:38.508 --> 00:11:41.874 by the pediatrician is very

NOTE Confidence: 0.941908941428571

00:11:41.874 --> 00:11:45.880 important to see if a person has

NOTE Confidence: 0.941908941428571

00:11:45.880 --> 00:11:47.655 the signs or symptoms that

NOTE Confidence: 0.941908941428571

00:11:47.655 --> 00:11:49.430 seem to be like cancer.

NOTE Confidence: 0.90665947

00:11:50.670 --> 00:11:53.270 And many of those really

NOTE Confidence: 0.90665947

00:11:53.270 --> 00:11:55.749 seem like they would be commonplace.

NOTE Confidence: 0.90665947

00:11:55.750 --> 00:11:57.982 And I think one of the things that

NOTE Confidence: 0.90665947

00:11:57.982 --> 00:12:00.630 you made clear is that while these

NOTE Confidence: 0.90665947

00:12:00.630 --> 00:12:02.246 symptoms may seem commonplace,

NOTE Confidence: 0.90665947

00:12:02.250 --> 00:12:03.530 a little bit of fatigue,

NOTE Confidence: 0.90665947

00:12:03.530 --> 00:12:07.550 a little bit of

NOTE Confidence: 0.90665947

00:12:07.550 --> 00:12:11.379 fever, maybe a headache, if these

NOTE Confidence: 0.90665947

00:12:11.379 --> 00:12:14.320 are persistent and unexplained,

NOTE Confidence: 0.90665947

00:12:14.320 --> 00:12:16.415 that's really when you

NOTE Confidence: 0.90665947

00:12:16.415 --> 00:12:18.896 want to see your pediatrician and

NOTE Confidence: 0.90665947

00:12:18.896 --> 00:12:20.780 kind of get this checked out.

NOTE Confidence: 0.90665947

00:12:20.780 --> 00:12:23.186 One question that our listeners might

NOTE Confidence: 0.90665947

00:12:23.186 --> 00:12:25.799 have is how persistent is persistent?

NOTE Confidence: 0.90665947

00:12:25.800 --> 00:12:27.936 Like, should I wait a week,

NOTE Confidence: 0.90665947

00:12:27.940 --> 00:12:30.152 two weeks, two months?

NOTE Confidence: 0.90665947

00:12:30.152 --> 00:12:33.470 When would you suggest that if

NOTE Confidence: 0.90665947

00:12:33.579 --> 00:12:36.915 if a child is not doing so well?

NOTE Confidence: 0.90665947

00:12:36.920 --> 00:12:38.992 How long should you wait before you

NOTE Confidence: 0.90665947

00:12:38.992 --> 00:12:41.500 you go and and seek medical advice?

NOTE Confidence: 0.789330948116667

00:12:42.370 --> 00:12:45.562 It's a great question and I think

NOTE Confidence: 0.789330948116667

00:12:45.562 --> 00:12:48.369 it's dependent on each situation.

NOTE Confidence: 0.789330948116667

00:12:48.370 --> 00:12:53.034 Definitely if a child is getting worse each

NOTE Confidence: 0.789330948116667

00:12:53.034 --> 00:12:57.100 day or each hour and your child,

NOTE Confidence: 0.789330948116667

00:12:57.100 --> 00:12:59.010 they'll run around and play

NOTE Confidence: 0.789330948116667

00:12:59.010 --> 00:13:01.260 and when they're not feeling well,

NOTE Confidence: 0.789330948116667

00:13:01.260 --> 00:13:01.990 they don't.

NOTE Confidence: 0.789330948116667

00:13:01.990 --> 00:13:04.545 And if you're noticing more of that,

NOTE Confidence: 0.789330948116667

00:13:04.550 --> 00:13:05.420 they're not playing,

NOTE Confidence: 0.789330948116667

00:13:05.420 --> 00:13:07.138 they're not eating, they're not

NOTE Confidence: 0.789330948116667

00:13:07.138 --> 00:13:10.106 doing the things they need to do,

NOTE Confidence: 0.789330948116667

00:13:10.110 --> 00:13:13.264 then you need to contact your

NOTE Confidence: 0.789330948116667

00:13:13.264 --> 00:13:15.766 pediatrician and tell them of your

NOTE Confidence: 0.789330948116667

00:13:15.766 --> 00:13:18.119 concerns and have the pediatrician take

NOTE Confidence: 0.789330948116667

00:13:18.119 --> 00:13:20.990 a look so I wouldn't wait too long.

NOTE Confidence: 0.789330948116667

00:13:20.990 --> 00:13:23.587 On the other hand, if the symptoms

NOTE Confidence: 0.789330948116667

00:13:23.587 --> 00:13:26.397 are very mild and they come and go,

NOTE Confidence: 0.789330948116667

00:13:26.400 --> 00:13:30.456 they don't impact the child's activities

NOTE Confidence: 0.789330948116667

00:13:30.456 --> 00:13:36.190 or school or appetite and their symptoms

NOTE Confidence: 0.789330948116667

00:13:36.190 --> 00:13:40.026 resolve for months on end,

NOTE Confidence: 0.789330948116667

00:13:40.030 --> 00:13:42.984 then that is not a time to

NOTE Confidence: 0.789330948116667

00:13:42.984 --> 00:13:45.410 necessarily contact your pediatrician.

NOTE Confidence: 0.789330948116667

00:13:45.410 --> 00:13:46.306 Whatever happened,

NOTE Confidence: 0.789330948116667

00:13:46.306 --> 00:13:47.650 it has resolved.

NOTE Confidence: 0.894471757777778

00:13:49.170 --> 00:13:51.816 OK, great. Well, we're going to dive

NOTE Confidence: 0.894471757777778

00:13:51.816 --> 00:13:54.486 more into the diagnosis and treatment

NOTE Confidence: 0.894471757777778

00:13:54.486 --> 00:13:57.390 of childhood cancers right after we

NOTE Confidence: 0.894471757777778

00:13:57.390 --> 00:14:00.604 take a quick break for a medical minute.

NOTE Confidence: 0.894471757777778

00:14:00.610 --> 00:14:02.206 Please stay tuned to learn more

NOTE Confidence: 0.894471757777778

00:14:02.206 --> 00:14:03.998 about the care of childhood cancer

NOTE Confidence: 0.894471757777778

00:14:03.998 --> 00:14:06.120 with my guest, Doctor Mary Hogan.

NOTE Confidence: 0.767868358

00:14:06.620 --> 00:14:08.600 Funding for Yale Cancer Answers

NOTE Confidence: 0.767868358

00:14:08.600 --> 00:14:10.580 comes from Smilow Cancer Hospital,

NOTE Confidence: 0.767868358

00:14:10.580 --> 00:14:12.108 where the gynecologic oncology

NOTE Confidence: 0.767868358

00:14:12.108 --> 00:14:14.400 program brings together a team of

NOTE Confidence: 0.767868358

00:14:14.465 --> 00:14:16.613 clinicians whose focus is to care

NOTE Confidence: 0.767868358

00:14:16.613 --> 00:14:18.590 for women with gynecologic cancers.

NOTE Confidence: 0.767868358

00:14:18.590 --> 00:14:19.910 Learn more at yalecancercenter.org.

NOTE Confidence: 0.015217245

00:14:25.830 --> 00:14:28.122 There are over 16.9 million

NOTE Confidence: 0.015217245

00:14:28.122 --> 00:14:31.140 cancer survivors in the US and

NOTE Confidence: 0.015217245

00:14:31.243 --> 00:14:33.182 over 240,000 here in Connecticut.

NOTE Confidence: 0.015217245

00:14:33.182 --> 00:14:34.734 Completing treatment for cancer

NOTE Confidence: 0.015217245

00:14:34.734 --> 00:14:37.009 is a very exciting milestone,

NOTE Confidence: 0.015217245

00:14:37.010 --> 00:14:38.978 but cancer and its treatment can

NOTE Confidence: 0.015217245

00:14:38.978 --> 00:14:41.070 be a life changing experience.

NOTE Confidence: 0.015217245

00:14:41.070 --> 00:14:43.090 The return to normal activities

NOTE Confidence: 0.015217245

00:14:43.090 --> 00:14:45.110 and relationships may be difficult

NOTE Confidence: 0.015217245

00:14:45.173 --> 00:14:46.948 and cancer survivors may face

NOTE Confidence: 0.015217245

00:14:46.948 --> 00:14:49.215 other long term side effects of

NOTE Confidence: 0.015217245

00:14:49.215 --> 00:14:50.927 cancer including heart problems,

NOTE Confidence: 0.015217245

00:14:50.930 --> 00:14:51.495 osteoporosis,

NOTE Confidence: 0.015217245

00:14:51.495 --> 00:14:54.320 fertility issues and an increased

NOTE Confidence: 0.015217245

00:14:54.320 --> 00:14:56.580 risk of second cancers.

NOTE Confidence: 0.015217245

00:14:56.580 --> 00:14:59.180 Resources for cancer survivors are

NOTE Confidence: 0.015217245

00:14:59.180 --> 00:15:01.260 available at federally designated

NOTE Confidence: 0.015217245

00:15:01.260 --> 00:15:02.516 Comprehensive cancer centers

NOTE Confidence: 0.015217245

00:15:02.516 --> 00:15:04.532 such as Yale Cancer Center

NOTE Confidence: 0.015217245

00:15:04.532 --> 00:15:06.600 and Smilow Cancer Hospital

NOTE Confidence: 0.015217245

00:15:06.600 --> 00:15:08.600 to keep cancer survivors well

NOTE Confidence: 0.015217245

00:15:08.600 --> 00:15:10.600 and focused on healthy living.

NOTE Confidence: 0.015217245

00:15:10.600 --> 00:15:12.905 The Smilow Cancer Hospital Survivorship

NOTE Confidence: 0.015217245

00:15:12.905 --> 00:15:15.210 Clinic focuses on providing guidance

NOTE Confidence: 0.015217245

00:15:15.271 --> 00:15:17.455 and direction to empower survivors to

NOTE Confidence: 0.015217245

00:15:17.455 --> 00:15:19.759 take steps to maximize their health,

NOTE Confidence: 0.015217245

00:15:19.760 --> 00:15:21.176 quality of life,

NOTE Confidence: 0.015217245

00:15:21.176 --> 00:15:22.120 and longevity.

NOTE Confidence: 0.015217245

00:15:22.120 --> 00:15:25.040 More information is available at

NOTE Confidence: 0.015217245

00:15:25.040 --> 00:15:26.848 yalecancercenter.org. You're listening to

NOTE Confidence: 0.015217245

00:15:26.848 --> 00:15:28.204 Connecticut Public Radio.

NOTE Confidence: 0.82170616

00:15:28.940 --> 00:15:31.418 Welcome back to Yale Cancer Answers.

NOTE Confidence: 0.82170616

00:15:31.420 --> 00:15:33.780 This is doctor Anees Chagpar and I'm joined

NOTE Confidence: 0.82170616

00:15:33.780 --> 00:15:36.120 tonight by my guest, Doctor Mary Hogan.

NOTE Confidence: 0.82170616

00:15:36.120 --> 00:15:38.920 We're talking about the care of patients

NOTE Confidence: 0.82170616

00:15:38.992 --> 00:15:41.716 with childhood cancer in honor of

NOTE Confidence: 0.82170616

00:15:41.716 --> 00:15:43.532 childhood Cancer Awareness Month.

NOTE Confidence: 0.82170616

00:15:43.540 --> 00:15:45.944 And right before the break, Mary,

NOTE Confidence: 0.82170616

00:15:45.944 --> 00:15:48.680 you were telling us about all of the symptoms

NOTE Confidence: 0.82170616

00:15:48.743 --> 00:15:51.067 that you should really be watching for.

NOTE Confidence: 0.82170616

00:15:51.070 --> 00:15:53.485 What can you expect in terms of

NOTE Confidence: 0.82170616

00:15:53.485 --> 00:15:56.540 a work up for a potential cancer?

NOTE Confidence: 0.82170616

00:15:56.540 --> 00:15:58.927 Tell us more about how the diagnosis

NOTE Confidence: 0.82170616

00:15:58.930 --> 00:16:02.840 of childhood cancers are made.

NOTE Confidence: 0.812525245238095

00:16:02.910 --> 00:16:06.150 Your pediatrician and child's pediatrician

NOTE Confidence: 0.812525245238095

00:16:06.150 --> 00:16:10.000 may order some blood tests or some simple

NOTE Confidence: 0.812525245238095

00:16:10.000 --> 00:16:13.390 imaging such as X-rays or an ultrasound,

NOTE Confidence: 0.812525245238095

00:16:13.390 --> 00:16:15.305 and when they find something

NOTE Confidence: 0.812525245238095

00:16:15.305 --> 00:16:17.640 abnormal or alarming or are not sure,

NOTE Confidence: 0.812525245238095

00:16:17.640 --> 00:16:21.120 they'll refer to a pediatric oncologist

NOTE Confidence: 0.812525245238095

00:16:21.120 --> 00:16:25.656 and we will often get blood tests.

NOTE Confidence: 0.812525245238095

00:16:25.660 --> 00:16:28.948 We will often get other more advanced imaging

NOTE Confidence: 0.812525245238095

00:16:28.950 --> 00:16:32.830 such as CT scans or MRIs.

NOTE Confidence: 0.812525245238095

00:16:32.830 --> 00:16:36.808 And based on those, then we get our experts,

NOTE Confidence: 0.812525245238095

00:16:36.810 --> 00:16:39.120 pediatric surgeons to help us get

NOTE Confidence: 0.812525245238095

00:16:39.120 --> 00:16:42.379 a biopsy of a mass that we might

NOTE Confidence: 0.812525245238095

00:16:42.379 --> 00:16:44.424 have found on the imaging.

NOTE Confidence: 0.812525245238095

00:16:44.430 --> 00:16:47.027 Or we ask our specialists in pathology

NOTE Confidence: 0.812525245238095

00:16:47.027 --> 00:16:50.409 to take a look at the blood samples to

NOTE Confidence: 0.812525245238095

00:16:50.409 --> 00:16:53.569 see if there's any abnormal cells there.

NOTE Confidence: 0.812525245238095

00:16:53.570 --> 00:16:55.526 And then once we have an

NOTE Confidence: 0.812525245238095

00:16:55.526 --> 00:16:57.650 idea that it is a cancer,

NOTE Confidence: 0.812525245238095

00:16:57.650 --> 00:16:59.450 we do even more extensive

NOTE Confidence: 0.812525245238095

00:16:59.450 --> 00:17:02.842 testing to find out the exact kind of

NOTE Confidence: 0.812525245238095

00:17:02.842 --> 00:17:06.589 cancer so that we can deliver the most

NOTE Confidence: 0.812525245238095

00:17:06.589 --> 00:17:10.207 appropriate therapy for the best outcomes.

NOTE Confidence: 0.80663796

00:17:10.820 --> 00:17:14.229 I can only imagine that when that

NOTE Confidence: 0.80663796

00:17:14.229 --> 00:17:17.050 diagnosis comes down and you tell a

NOTE Confidence: 0.80663796

00:17:17.050 --> 00:17:19.360 child's parent that their

NOTE Confidence: 0.80663796

00:17:19.360 --> 00:17:22.872 child has cancer, that can be

NOTE Confidence: 0.80663796

00:17:22.872 --> 00:17:25.812 just devastating for that family.

NOTE Confidence: 0.80663796

00:17:25.820 --> 00:17:28.766 Tell me more about how you

NOTE Confidence: 0.80663796

00:17:28.766 --> 00:17:30.730 get patients

NOTE Confidence: 0.80663796

00:17:30.730 --> 00:17:31.819 and their families,

NOTE Confidence: 0.80663796

00:17:31.819 --> 00:17:33.997 through that kind of a diagnosis.

NOTE Confidence: 0.7622648875

00:17:34.450 --> 00:17:38.308 Cancer is a devastating diagnosis.

NOTE Confidence: 0.7622648875

00:17:38.310 --> 00:17:40.035 Everybody has been touched by

NOTE Confidence: 0.7622648875

00:17:40.035 --> 00:17:42.170 cancer in some way or form,

NOTE Confidence: 0.7622648875

00:17:42.170 --> 00:17:45.166 whether it be relative or a neighbor,

NOTE Confidence: 0.7622648875

00:17:45.170 --> 00:17:47.540 and they bring their own

NOTE Confidence: 0.7622648875

00:17:47.540 --> 00:17:49.910 experiences with them to this.

NOTE Confidence: 0.7622648875

00:17:49.910 --> 00:17:52.566 So once you hear your child has cancer,

NOTE Confidence: 0.7622648875

00:17:52.570 --> 00:17:55.486 as you said, it is devastating

NOTE Confidence: 0.7622648875

00:17:55.490 --> 00:17:57.640 and everybody is in shock.

NOTE Confidence: 0.7622648875

00:17:57.640 --> 00:18:03.024 And it is difficult to deliver that news,

NOTE Confidence: 0.7622648875

00:18:03.030 --> 00:18:04.530 however, at the same time,

NOTE Confidence: 0.7622648875

00:18:04.530 --> 00:18:07.059 we want to get the child better and we

NOTE Confidence: 0.7622648875

00:18:07.059 --> 00:18:10.570 want a cure, and we want to get moving

NOTE Confidence: 0.7622648875

00:18:10.570 --> 00:18:12.590 on treatment so we can get there.

NOTE Confidence: 0.7622648875

00:18:12.590 --> 00:18:18.057 So we don't want to wait too

NOTE Confidence: 0.7622648875

00:18:18.057 --> 00:18:21.070 long in belaboring it.

NOTE Confidence: 0.7622648875

00:18:21.070 --> 00:18:23.608 So we want to be supportive of the family.

NOTE Confidence: 0.7622648875

00:18:23.610 --> 00:18:25.842 We have social workers and psychologists

NOTE Confidence: 0.7622648875

00:18:25.842 --> 00:18:28.986 help us so that we can deliver the news

NOTE Confidence: 0.7622648875

00:18:28.990 --> 00:18:33.015 to where the family is and

NOTE Confidence: 0.7622648875

00:18:33.015 --> 00:18:35.465 understanding from their experiences,

NOTE Confidence: 0.7622648875

00:18:35.465 --> 00:18:38.956 but also the child at different

NOTE Confidence: 0.7622648875

00:18:38.956 --> 00:18:40.928 ages you have different

NOTE Confidence: 0.7622648875

00:18:40.930 --> 00:18:42.793 cognitive abilities,

NOTE Confidence: 0.7622648875

00:18:42.793 --> 00:18:46.918 and so it's important to answer

NOTE Confidence: 0.7622648875

00:18:46.918 --> 00:18:48.112 their questions appropriately

NOTE Confidence: 0.7622648875

00:18:48.112 --> 00:18:50.500 and make them aware of this.

NOTE Confidence: 0.7622648875

00:18:50.500 --> 00:18:54.055 They are directly involved in

NOTE Confidence: 0.7622648875

00:18:54.055 --> 00:18:57.610 the treatment, they will need

NOTE Confidence: 0.7622648875

00:18:57.610 --> 00:19:00.010 blood tests and imaging as I

NOTE Confidence: 0.7622648875

00:19:00.010 --> 00:19:02.375 mentioned and the therapies that we

NOTE Confidence: 0.7622648875

00:19:02.375 --> 00:19:04.776 give have to be sometimes taken by

NOTE Confidence: 0.7622648875

00:19:04.776 --> 00:19:07.270 mouth or given intravenously or

NOTE Confidence: 0.7622648875

00:19:07.270 --> 00:19:11.194 you have to sit still for radiation therapy.

NOTE Confidence: 0.7622648875

00:19:11.194 --> 00:19:15.144 So the child needs to be aware of

NOTE Confidence: 0.7622648875

00:19:15.144 --> 00:19:18.306 why they're getting the therapy and

NOTE Confidence: 0.7622648875

00:19:18.310 --> 00:19:21.698 what it means to complete

NOTE Confidence: 0.7622648875

00:19:21.698 --> 00:19:24.030 your treatment of therapy.

NOTE Confidence: 0.7622648875

00:19:24.030 --> 00:19:27.665 It's a very difficult conversation and

NOTE Confidence: 0.7622648875

00:19:27.665 --> 00:19:31.830 we all are upset by it.

NOTE Confidence: 0.7622648875

00:19:31.830 --> 00:19:34.715 And at the same time, we want to help.

NOTE Confidence: 0.8614357336

00:19:37.420 --> 00:19:40.730 And I do find that a lot of

NOTE Confidence: 0.8614357336

00:19:40.730 --> 00:19:43.274 kids are really pretty resilient

NOTE Confidence: 0.8614357336

00:19:43.274 --> 00:19:46.431 and they will power through

NOTE Confidence: 0.8614357336

00:19:46.431 --> 00:19:51.404 that with with some form of enthusiasm

NOTE Confidence: 0.8614357336

00:19:51.404 --> 00:19:56.324 even when their parents may be more

NOTE Confidence: 0.8614357336

00:19:56.324 --> 00:19:58.704 devastated than the child sometimes.

NOTE Confidence: 0.845942998

00:20:00.090 --> 00:20:02.250 For sure. Kids are amazing.

NOTE Confidence: 0.845942998

00:20:02.250 --> 00:20:04.167 They're like, how long is this going to take?

NOTE Confidence: 0.845942998

00:20:04.170 --> 00:20:06.424 I need to get to baseball practice.

00:20:07.018 --> 00:20:08.630 Is this going to interfere with the prom?

NOTE Confidence: 0.845942998

00:20:08.630 --> 00:20:10.460 Because we need to rearrange this

NOTE Confidence: 0.845942998

00:20:10.460 --> 00:20:12.830 treatment schedule

NOTE Confidence: 0.845942998

00:20:12.830 --> 00:20:14.965 and so we ask the kids,

NOTE Confidence: 0.845942998

00:20:14.970 --> 00:20:16.248 where are you at?

NOTE Confidence: 0.845942998

00:20:16.250 --> 00:20:17.186 What do we need to do?

NOTE Confidence: 0.845942998

00:20:17.190 --> 00:20:19.070 How do we get you to the clinic?

NOTE Confidence: 0.845942998

00:20:19.070 --> 00:20:21.482 And how do we get you to the more

NOTE Confidence: 0.845942998

00:20:21.482 --> 00:20:23.566 important things of your life as well?

NOTE Confidence: 0.845942998

00:20:23.570 --> 00:20:26.450 So kids are amazing.

NOTE Confidence: 0.845942998

00:20:26.450 --> 00:20:27.540 And so are the parents.

NOTE Confidence: 0.884627328571429

00:20:28.010 --> 00:20:29.606 Talk to us a little bit

NOTE Confidence: 0.884627328571429

00:20:29.610 --> 00:20:32.130 more about the the various treatment

NOTE Confidence: 0.884627328571429

00:20:32.130 --> 00:20:34.542 modalities that are used to treat

NOTE Confidence: 0.884627328571429

00:20:34.542 --> 00:20:36.852 children with cancer and

NOTE Confidence: 0.884627328571429

00:20:36.852 --> 00:20:39.763 I realize that it's a little

NOTE Confidence: 0.884627328571429

00:20:39.763 --> 00:20:41.809 difficult given the fact that there

NOTE Confidence: 0.884627328571429

00:20:41.809 --> 00:20:44.070 are so many different kinds of cancer

NOTE Confidence: 0.884627328571429

00:20:44.133 --> 00:20:46.261 that are kind of all clumped under

NOTE Confidence: 0.884627328571429

00:20:46.261 --> 00:20:48.279 the umbrella of childhood cancer.

NOTE Confidence: 0.884627328571429

00:20:48.280 --> 00:20:50.440 But talk to us a bit about the types

NOTE Confidence: 0.884627328571429

00:20:50.440 --> 00:20:52.563 of therapies and their duration so that

NOTE Confidence: 0.884627328571429

00:20:52.563 --> 00:20:55.570 we can get a sense of what exactly does

NOTE Confidence: 0.884627328571429

00:20:55.570 --> 00:20:57.840 treatment look like for these kids.

NOTE Confidence: 0.864844523

00:20:58.560 --> 00:20:59.820 Sure, treatment

NOTE Confidence: 0.864844523

00:20:59.820 --> 00:21:02.760 is directed toward the specific type of cancer.

NOTE Confidence: 0.864844523

00:21:02.760 --> 00:21:05.483 And every year we become more specific

NOTE Confidence: 0.864844523

00:21:05.483 --> 00:21:08.117 about the type of cancer you have.

NOTE Confidence: 0.864844523

00:21:08.120 --> 00:21:10.535 We just don't lump it under leukemia.

NOTE Confidence: 0.864844523

00:21:10.540 --> 00:21:12.980 Now we we literally go

NOTE Confidence: 0.864844523

00:21:12.980 --> 00:21:15.420 down the path of directed

NOTE Confidence: 0.864844523

00:21:15.420 --> 00:21:17.215 targeted therapies and the reason

NOTE Confidence: 0.864844523

00:21:17.215 --> 00:21:20.505 why we do that is to reduce toxic

NOTE Confidence: 0.864844523

00:21:20.505 --> 00:21:22.397 effects from these medications.

NOTE Confidence: 0.864844523

00:21:22.400 --> 00:21:24.320 If you don't need as much

NOTE Confidence: 0.864844523

00:21:24.320 --> 00:21:26.020 therapy to achieve a cure,

NOTE Confidence: 0.864844523

00:21:26.020 --> 00:21:28.414 we would like to eliminate those therapies.

NOTE Confidence: 0.864844523

00:21:28.420 --> 00:21:30.028 Whereas if you have a more

NOTE Confidence: 0.864844523

00:21:30.028 --> 00:21:31.100 difficult cancer to treat,

NOTE Confidence: 0.864844523

00:21:31.100 --> 00:21:33.900 we want to give you all the

NOTE Confidence: 0.864844523

00:21:33.900 --> 00:21:35.126 available therapies, and

NOTE Confidence: 0.864844523

00:21:35.126 --> 00:21:37.256 therapies, as I mentioned before,

NOTE Confidence: 0.864844523

00:21:37.260 --> 00:21:40.460 can be taken by mouth or intravenously

NOTE Confidence: 0.864844523

00:21:40.460 --> 00:21:43.818 or given in a variety of different ways.

NOTE Confidence: 0.864844523

00:21:43.820 --> 00:21:45.836 So our basic

NOTE Confidence: 0.864844523

00:21:45.836 --> 00:21:48.524 treatments are called chemotherapy.

NOTE Confidence: 0.864844523

00:21:48.530 --> 00:21:50.475 They're given in combinations because

NOTE Confidence: 0.864844523

00:21:50.475 --> 00:21:53.659 they act on the cancer cells differently.

NOTE Confidence: 0.864844523

00:21:53.660 --> 00:21:56.828 And over the past 50 years,

NOTE Confidence: 0.864844523

00:21:56.830 --> 00:21:58.430 based on children who have

NOTE Confidence: 0.864844523

00:21:58.430 --> 00:22:00.030 enrolled in our clinical trials,

NOTE Confidence: 0.864844523

00:22:00.030 --> 00:22:02.030 we've come up with standard

NOTE Confidence: 0.864844523

00:22:02.030 --> 00:22:04.030 of care throughout the nation.

NOTE Confidence: 0.864844523

00:22:04.030 --> 00:22:05.230 How best to treat this.

NOTE Confidence: 0.864844523

00:22:05.230 --> 00:22:09.590 And we're always trying to improve upon this.

NOTE Confidence: 0.864844523

00:22:09.590 --> 00:22:13.700 More recently to our chemotherapies, well

NOTE Confidence: 0.864844523

00:22:13.700 --> 00:22:14.864 not more recently,

NOTE Confidence: 0.864844523

00:22:14.864 --> 00:22:16.416 but standardly to chemotherapy

NOTE Confidence: 0.864844523

00:22:16.420 --> 00:22:19.498 certain cancers may need radiation therapy,

NOTE Confidence: 0.864844523

00:22:19.500 --> 00:22:22.300 where special ionized particles

NOTE Confidence: 0.864844523

00:22:22.300 --> 00:22:25.800 are delivered to the cancer

NOTE Confidence: 0.864844523

00:22:25.800 --> 00:22:28.908 site to kill cancer cells.

NOTE Confidence: 0.864844523

00:22:28.910 --> 00:22:31.941 Surgery is also very important in our

NOTE Confidence: 0.864844523

00:22:31.941 --> 00:22:34.572 treatment of cancers for certain types

NOTE Confidence: 0.864844523

00:22:34.572 --> 00:22:38.660 of cancers where the tumor is removed.

NOTE Confidence: 0.864844523

00:22:38.660 --> 00:22:42.685 And we now have more recently immune

NOTE Confidence: 0.864844523

00:22:42.685 --> 00:22:47.025 therapy where we can give medication to

NOTE Confidence: 0.864844523

00:22:47.025 --> 00:22:52.370 target a protein on the tumor which will

NOTE Confidence: 0.864844523

00:22:52.370 --> 00:22:54.715 allow our immune system to attack the

NOTE Confidence: 0.864844523

00:22:54.715 --> 00:22:57.120 tumor or cancer as if it was foreign.

NOTE Confidence: 0.864844523

00:22:57.120 --> 00:22:59.408 And that's really cool.

NOTE Confidence: 0.864844523

00:22:59.408 --> 00:23:02.268 And our targeted therapies work

NOTE Confidence: 0.864844523

00:23:02.268 --> 00:23:04.790 by attacking the gene that's in

NOTE Confidence: 0.864844523

00:23:04.790 --> 00:23:07.477 the gene mutations that are in the

NOTE Confidence: 0.864844523

00:23:07.477 --> 00:23:10.528 cancer cells so that we're leaving

NOTE Confidence: 0.864844523

00:23:10.528 --> 00:23:13.513 our normal healthy cells alone.

NOTE Confidence: 0.864844523

00:23:13.520 --> 00:23:16.472 So we have very strong therapies

NOTE Confidence: 0.864844523

00:23:16.472 --> 00:23:18.440 called hematopoietic stem cell

NOTE Confidence: 0.864844523

00:23:18.520 --> 00:23:21.410 transplant or bone marrow transplant

NOTE Confidence: 0.864844523

00:23:21.410 --> 00:23:23.994 where strong medicines are given

NOTE Confidence: 0.864844523

00:23:23.994 --> 00:23:26.578 to eliminate the cancers.

NOTE Confidence: 0.864844523

00:23:26.580 --> 00:23:30.598 Not many cancers require this

NOTE Confidence: 0.864844523

00:23:30.598 --> 00:23:34.310 for therapy and we also have even

NOTE Confidence: 0.864844523

00:23:34.310 --> 00:23:36.358 stronger therapy called chimeric

NOTE Confidence: 0.864844523

00:23:36.358 --> 00:23:38.842 antigen receptor T cell therapy

NOTE Confidence: 0.864844523

00:23:38.842 --> 00:23:41.668 also used in very rare instances.

NOTE Confidence: 0.864844523

00:23:41.670 --> 00:23:44.659 Cancer therapy may last as long as

NOTE Confidence: 0.864844523

00:23:44.659 --> 00:23:48.129 two to three years in certain cases.

NOTE Confidence: 0.864844523

00:23:48.130 --> 00:23:50.908 And as short as you know,

NOTE Confidence: 0.864844523

00:23:50.910 --> 00:23:53.650 three to six months,

NOTE Confidence: 0.864844523

00:23:53.650 --> 00:23:57.582 so it really is on us to find

NOTE Confidence: 0.864844523

00:23:57.582 --> 00:23:59.781 the exact cancer you have and

NOTE Confidence: 0.864844523

00:23:59.781 --> 00:24:01.517 to treat it appropriately.

NOTE Confidence: 0.818290503157895

00:24:02.520 --> 00:24:05.768 And so one would imagine that with

NOTE Confidence: 0.818290503157895

00:24:05.768 --> 00:24:08.988 whatever type of therapy kids get

NOTE Confidence: 0.818290503157895

00:24:08.988 --> 00:24:12.450 treated with for their childhood cancer,

NOTE Confidence: 0.818290503157895

00:24:12.450 --> 00:24:14.538 that's going to cause some side

NOTE Confidence: 0.818290503157895

00:24:14.538 --> 00:24:16.854 effects and so whether this is a

NOTE Confidence: 0.818290503157895

00:24:16.854 --> 00:24:18.558 three month course of therapy or

NOTE Confidence: 0.818290503157895

00:24:18.558 --> 00:24:20.779 a three-year course of therapy,

NOTE Confidence: 0.818290503157895

00:24:20.780 --> 00:24:22.484 how do you deal with some

NOTE Confidence: 0.818290503157895

00:24:22.484 --> 00:24:23.620 of those side effects?

NOTE Confidence: 0.818290503157895

00:24:23.620 --> 00:24:25.769 Can you talk to us about those

NOTE Confidence: 0.818290503157895

00:24:25.769 --> 00:24:27.820 side effects that kids may

NOTE Confidence: 0.818290503157895

00:24:27.820 --> 00:24:29.580 face going through cancer therapy

NOTE Confidence: 0.818290503157895

00:24:29.580 --> 00:24:31.926 and how that kind of affects their

NOTE Confidence: 0.818290503157895

00:24:31.926 --> 00:24:34.406 lives both in terms of the time in

NOTE Confidence: 0.818290503157895

00:24:34.406 --> 00:24:35.916 which they're getting the therapy?

NOTE Confidence: 0.818290503157895

00:24:35.920 --> 00:24:38.139 How does that affect

NOTE Confidence: 0.818290503157895

00:24:38.139 --> 00:24:41.156 them going to school and

NOTE Confidence: 0.818290503157895

00:24:41.156 --> 00:24:43.151 in interacting with their friends?

NOTE Confidence: 0.818290503157895

00:24:43.160 --> 00:24:46.090 And so on and so forth as well as long term,

NOTE Confidence: 0.818290503157895

00:24:46.090 --> 00:24:48.771 I mean are there effects that people

NOTE Confidence: 0.818290503157895

00:24:48.771 --> 00:24:51.199 should be cognizant of in terms of

NOTE Confidence: 0.818290503157895

00:24:51.199 --> 00:24:53.957 the long term side effects of some of

NOTE Confidence: 0.818290503157895

00:24:53.957 --> 00:24:56.157 these therapies for childhood cancer?

NOTE Confidence: 0.815392385833333

00:24:56.840 --> 00:24:59.619 One of our secondary goals

NOTE Confidence: 0.815392385833333

00:24:59.619 --> 00:25:01.950 during our cancer therapy is to

NOTE Confidence: 0.815392385833333

00:25:01.950 --> 00:25:04.414 make sure kids get back to school

NOTE Confidence: 0.815392385833333

00:25:04.497 --> 00:25:07.017 and keep up with their school work

NOTE Confidence: 0.815392385833333

00:25:07.017 --> 00:25:08.738 and all their fun activities.

00:25:16.190 --> 00:25:18.710 Sometimes the children will be back in the classroom,

NOTE Confidence: 0.815392385833333

00:25:18.710 --> 00:25:20.950 sometimes we will need to provide tutors

NOTE Confidence: 0.815392385833333

00:25:20.950 --> 00:25:23.109 because they're in the hospital setting.

NOTE Confidence: 0.815392385833333

00:25:23.110 --> 00:25:25.798 So some of the short term side

NOTE Confidence: 0.815392385833333

00:25:25.798 --> 00:25:28.640 effects of her medication range from

NOTE Confidence: 0.815392385833333

00:25:28.640 --> 00:25:30.890 mild where you don't really notice

NOTE Confidence: 0.815392385833333

00:25:30.890 --> 00:25:34.471 it to more severe where we need to

NOTE Confidence: 0.815392385833333

00:25:34.471 --> 00:25:36.998 give supportive medications so that

NOTE Confidence: 0.815392385833333

00:25:36.998 --> 00:25:39.868 it eliminates these side effects.

NOTE Confidence: 0.815392385833333

00:25:39.870 --> 00:25:43.070 A common side effect is nausea and vomiting,

NOTE Confidence: 0.815392385833333

00:25:43.070 --> 00:25:44.760 and this is dealt with

NOTE Confidence: 0.815392385833333

00:25:44.760 --> 00:25:49.184 with mild to very strong anti nausea

NOTE Confidence: 0.815392385833333

00:25:49.184 --> 00:25:51.792 medications. We have multiple combinations

NOTE Confidence: 0.815392385833333

00:25:51.792 --> 00:25:57.840 of them and compared to 30 years ago,

NOTE Confidence: 0.815392385833333

00:25:57.840 --> 00:26:01.249 many of our children need to be

NOTE Confidence: 0.815392385833333

00:26:01.249 --> 00:26:03.994 hospitalized for intravenous fluid because

NOTE Confidence: 0.815392385833333

00:26:03.994 --> 00:26:07.588 they're having excessive nausea and vomiting.

NOTE Confidence: 0.815392385833333

00:26:07.590 --> 00:26:11.076 Another common side effect is with

NOTE Confidence: 0.815392385833333

00:26:11.076 --> 00:26:13.406 certain therapies is hair loss.

NOTE Confidence: 0.815392385833333

00:26:13.410 --> 00:26:19.380 It is temporary but also very upsetting.

NOTE Confidence: 0.815392385833333

00:26:19.380 --> 00:26:23.000 We haven't found a supportive

NOTE Confidence: 0.815392385833333

00:26:23.000 --> 00:26:24.820 cure for that just yet,

NOTE Confidence: 0.815392385833333

00:26:24.820 --> 00:26:29.316 but some children will wear hats or

NOTE Confidence: 0.815392385833333

00:26:29.316 --> 00:26:32.130 wigs to make them feel more comfortable.

NOTE Confidence: 0.815392385833333

00:26:32.130 --> 00:26:35.074 Another side effect is to our blood cells.

NOTE Confidence: 0.815392385833333

00:26:35.080 --> 00:26:37.257 Our blood cells help us fight infection.

NOTE Confidence: 0.815392385833333

00:26:37.260 --> 00:26:38.418 Those are the white blood cells,

NOTE Confidence: 0.815392385833333

00:26:38.420 --> 00:26:39.340 or red blood cells,

NOTE Confidence: 0.815392385833333

00:26:39.340 --> 00:26:40.490 carry oxygen to a body.

NOTE Confidence: 0.815392385833333

00:26:40.490 --> 00:26:41.990 Those are red cells.

NOTE Confidence: 0.815392385833333

00:26:41.990 --> 00:26:44.173 And the platelets help us clot

NOTE Confidence: 0.815392385833333

00:26:44.173 --> 00:26:46.279 our blood when we're injured.

NOTE Confidence: 0.815392385833333

00:26:46.280 --> 00:26:49.990 And so sometimes a person may need

NOTE Confidence: 0.815392385833333

00:26:49.990 --> 00:26:52.635 transfusions or injections of

NOTE Confidence: 0.815392385833333

00:26:52.635 --> 00:26:55.280 medications to stimulate the production

NOTE Confidence: 0.815392385833333

00:26:55.358 --> 00:26:58.118 of these cells so that you don't feel

NOTE Confidence: 0.815392385833333

00:26:58.118 --> 00:27:00.863 tired and that you don't have nosebleeds

NOTE Confidence: 0.815392385833333

00:27:00.863 --> 00:27:04.426 and that you don't have infections.

NOTE Confidence: 0.815392385833333

00:27:04.426 --> 00:27:07.594 We are giving many

NOTE Confidence: 0.815392385833333

00:27:07.600 --> 00:27:09.751 preventative medications for

NOTE Confidence: 0.815392385833333

00:27:09.751 --> 00:27:14.053 infections so that there are less

NOTE Confidence: 0.815392385833333

00:27:14.053 --> 00:27:15.812 hospitalizations for bacterial

NOTE Confidence: 0.815392385833333

00:27:15.812 --> 00:27:18.500 infections or fungal infections.

NOTE Confidence: 0.815392385833333

00:27:18.500 --> 00:27:21.500 Those are some of the short

NOTE Confidence: 0.815392385833333

00:27:21.500 --> 00:27:23.720 term side effects.

NOTE Confidence: 0.815392385833333

00:27:23.720 --> 00:27:27.392 I think the main one that I didn't talk

NOTE Confidence: 0.815392385833333

00:27:27.392 --> 00:27:30.987 about was feeling tired and we try to

NOTE Confidence: 0.815392385833333

00:27:30.990 --> 00:27:33.834 Improve energy levels with

NOTE Confidence: 0.815392385833333

00:27:33.834 --> 00:27:36.117 nutrition and supporting the red

NOTE Confidence: 0.815392385833333

00:27:36.117 --> 00:27:38.605 blood cell count as much as we can,

NOTE Confidence: 0.815392385833333

00:27:38.610 --> 00:27:42.674 but we often will recommend not going

NOTE Confidence: 0.815392385833333

00:27:42.674 --> 00:27:46.082 full tilt on all your activities

NOTE Confidence: 0.815392385833333

00:27:46.082 --> 00:27:48.707 until the therapy is over.

NOTE Confidence: 0.815392385833333

00:27:48.710 --> 00:27:49.950 But do what you can,

NOTE Confidence: 0.815392385833333

00:27:49.950 --> 00:27:52.482 because we really support you going

NOTE Confidence: 0.815392385833333

00:27:52.482 --> 00:27:55.800 to school and seeing your friends and

NOTE Confidence: 0.815392385833333

00:27:55.800 --> 00:27:58.582 continuing with your activities over

NOTE Confidence: 0.815392385833333

00:27:58.582 --> 00:28:03.198 the long term. Some children may

NOTE Confidence: 0.815392385833333

00:28:03.200 --> 00:28:05.390 suffer a severe side effect from

NOTE Confidence: 0.815392385833333

00:28:05.390 --> 00:28:08.285 their medication at the time of the

NOTE Confidence: 0.815392385833333

00:28:08.285 --> 00:28:10.325 chemotherapy treatments and so may

NOTE Confidence: 0.815392385833333

00:28:10.325 --> 00:28:12.575 have residual side effects later on.

NOTE Confidence: 0.815392385833333

00:28:12.580 --> 00:28:14.465 Most children who have completed

NOTE Confidence: 0.815392385833333

00:28:14.465 --> 00:28:15.973 their therapy do well,

NOTE Confidence: 0.815392385833333

00:28:15.980 --> 00:28:18.385 but approximately 40% of our

NOTE Confidence: 0.815392385833333

00:28:18.385 --> 00:28:20.790 childhood cancer survivors may have

NOTE Confidence: 0.815392385833333

00:28:20.872 --> 00:28:22.718 one or more late effects.

NOTE Confidence: 0.815392385833333

00:28:22.718 --> 00:28:26.790 Those are signs or symptoms in other parts

NOTE Confidence: 0.815392385833333

00:28:26.885 --> 00:28:30.245 of the body that it can cause issues.

NOTE Confidence: 0.832389937142857

00:28:30.600 --> 00:28:33.197 Doctor Mary Hogan is an associate professor of

NOTE Confidence: 0.832389937142857

00:28:33.200 --> 00:28:34.968 Clinical Pediatrics and hematology

NOTE Confidence: 0.832389937142857

00:28:34.968 --> 00:28:38.300 oncology at the Yale School of Medicine.

NOTE Confidence: 0.832389937142857

00:28:38.300 --> 00:28:40.344 If you have questions,

NOTE Confidence: 0.832389937142857

00:28:40.344 --> 00:28:42.353 the address is canceranswers@yale.edu,

NOTE Confidence: 0.832389937142857

00:28:42.353 --> 00:28:45.191 and past editions of the program

NOTE Confidence: 0.832389937142857

00:28:45.191 --> 00:28:47.651 are available in audio and written

NOTE Confidence: 0.832389937142857

00:28:47.651 --> 00:28:48.609 form at yalecancercenter.org.

NOTE Confidence: 0.832389937142857

00:28:48.609 --> 00:28:51.081 We hope you'll join us next week to

NOTE Confidence: 0.832389937142857

00:28:51.081 --> 00:28:52.967 learn more about the fight against

NOTE Confidence: 0.832389937142857

00:28:52.967 --> 00:28:54.840 cancer here on Connecticut Public Radio.

NOTE Confidence: 0.832389937142857

00:28:54.840 --> 00:28:57.492 Funding for Yale Cancer Answers is

NOTE Confidence: 0.832389937142857

00:28:57.492 --> 00:29:00.000 provided by Smilow Cancer Hospital.