

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 class-
room,
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.