
LOOKING AT
VISION LOSS

1
00:00:00,000 --> 00:00:06,680
music

2
00:00:07,260 --> 00:00:10,280
The nice thing about the
one year twins mission,

3
00:00:10,536 --> 00:00:14,616
it brings a lot of high-quality
researchers together to look

4
00:00:14,616 --> 00:00:16,006
at a very specific problem.

5
00:00:16,126 --> 00:00:18,826
It gives us an opportunity
to look at the human body

6
00:00:18,826 --> 00:00:21,576
in a very detailed fashion
that we haven't done before.

7
00:00:22,036 --> 00:00:25,666
We're also looking at the
vision impairment syndrome,

8
00:00:26,246 --> 00:00:29,006
hypothesized to be
secondary, or as a result

9
00:00:29,006 --> 00:00:31,746
of the head ward fluid shift
the crew members experience

10
00:00:31,746 --> 00:00:32,646
during spaceflight.

11
00:00:33,036 --> 00:00:35,386
We're looking at not just

the cardiovascular system,

12
00:00:35,506 --> 00:00:39,606
but we're looking at the eye
itself and how it changes

13
00:00:39,606 --> 00:00:43,500
in its structure
and its function.

14
00:00:47,580 --> 00:00:49,820
There's a strong
cardiovascular component.

15
00:00:50,426 --> 00:00:53,596
How much blood and blood
pressure gets transmitted

16
00:00:53,596 --> 00:00:55,476
to the head, which
would be different

17
00:00:55,476 --> 00:00:56,596
than what's on the ground.

18
00:00:58,256 --> 00:01:01,016
The person that goes to
see their doctor every day,

19
00:01:01,016 --> 00:01:03,206
will have a potential
benefit from what we learn

20
00:01:03,540 --> 00:01:05,040
from looking at our astronauts.

21
00:01:09,760 --> 00:01:11,320
Some of the issues
that we're looking

22
00:01:11,400 --> 00:01:12,900
at for the one-year mission,

23
00:01:13,420 --> 00:01:17,020
are things that people would
normally experience on Earth.

24
00:01:25,760 --> 00:01:28,376
The sorts of physiologic
changes or adaptations

25
00:01:28,376 --> 00:01:33,776
that we've observed are ones
we would expect from people

26
00:01:33,776 --> 00:01:36,816
on 6-month mission to Mars.

27
00:01:37,026 --> 00:01:40,486
We stay busy, asking
new questions,