#### Catherine Jones, M.D.

# What are some symptoms of breast cancer? 00:06

Many times women are found to have breast cancer just on their screening mammograms and so they don't necessarily have any symptoms. And they just may feel totally normal and go in for imaging and then be found to have an abnormality. So it's important to know that there won't always be symptoms and so women should keep up screening. But if they do develop symptoms in the breast, commonly they'll have changes in the skin of the breast, maybe dimpling of the skin, retraction, they can have changes in the nipple with retraction or dimpling of the nipple, a palpable lump in the breast so people can sometimes feel a mass or have a lump in their armpit, and see changes in the appearance of the skin so the skin can look red hot, swollen, the breast can feel heavy, and rarely, but not impossibly, women can complain of pain in the breast.

## Who is at higher risk for breast cancer? 00:59

About 5% of breast cancers are because of an inherited genetic syndrome. So most commonly, we know of the BRCA, the one most people are familiar with. And so people who have that account for about 5% of breast cancer diagnosis, and they're significantly increased risk up to 80% in their lifetime for developing breast cancer. And that affects men as well. So typically only about one in 1000 men get breast cancer. But when there's the presence of a BRCA mutation, then that can become about one in 10. So that has a significant impact. About 15 to 25% of breast cancers occur because of a strong family history. So maybe a woman whose mother or grandmother had breast cancer, but there's no genetic inherited syndromes to predispose them. So that accounts for about 15 to 20%. And the majority of the breast cancer diagnosis. So about 75% of breast cancer diagnosis occur in women who don't have either inherited genetic syndrome or some familial cancers going on. And so breast cancer actually ends up affecting one in eight women.

### Why are mammograms and self checks so important? 02:06

So mammograms are an extremely effective screening tool. And so we're able to catch breast cancers at an early stage so that potentially they can be cured with just surgery, maybe add on some radiation or a pill to that, and those women can potentially be cured. And we're able to see it at a very early stage before patients develop any symptom. And so they're extremely important for that reason. And because breast cancer is so common, so as we said, one in eight women will develop breast cancer in their lifetime. So that's mom's brothers, I mean, sisters, grandparents, that will be affected by breast cancer. So most people know someone who's had breast cancer, or they have someone in their family who's had it. And so it's extremely common. If we catch it early than we can prevent people from having to go through as extensive surgeries or potentially needing chemotherapy. It's important to keep in mind, though, that it is an extremely effective tool, but it's not a perfect tool. And so there's about a 17% rate of missed breast cancers. And that's just sort of what happens with screening tests. And so people need to be aware that if they had a screening mammogram, that was normal, but maybe, you know, months later, they note an abnormality in their breast, they still need to bring that to the attention of their doctor so that it can be looked into. Because even with screening mammograms, it is possible to develop what we call interval cancers. And we worry about those especially in women who are at

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higher risk. But that's where someone has a screening mammogram and it is perfectly normal. And then months later develop a problem in the breast and we reimage it and some problem has come up.