

Medi-Vision™ Film Transcript

Programme 25

OBSTETRICS AND GYNAECOLOGY (3):

Assessment and Treatment of Common Gynaecological Problems

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Introduced by
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Introduction

DCA Dr Ian Duncan is Reader in Obstetrics and Gynaecology at the University of Dundee and a Consultant at Ninewells Hospital. And on this video he takes us through some important aspects of the gynaecological history, examination, and investigation, on a patient, Christine, who has two apparently separate gynaecological problems.

Dr Ian Duncan

Interview with patient

ID Hello Christine.

C Hi.

I You've been invited to come up to the clinic today, and I see that you've actually got two appointments, because you have two distinct problems.

The one that has brought you to the clinic today is the abnormal smear.

Now when you got this appointment, did you also get a sheet of paper through the post explaining to you the significance of an abnormal smear?

C Yes.

I You did. And did that help you to understand?

C Well.. not really.

I No? Had you known anyone who had an abnormal smear before?

C No.

I Well the first thing to put your mind at rest is that people who have an abnormal smear, it's very very unusual indeed for there to be any cancer there.

In fact your smear shows what we call "severe changes", but there is no suggestion of any cancer.

C Oh that's good.

I So the most likely explanation is this condition that the piece of paper talked about called CIN. It stands for a great long medical term called **cervical intra-epithelial neoplasia**; but CIN and probably grade three. There were also some **viral changes on the smear**, but these are very common.

And we know from experience that if we look for this type of virus - the human papilloma virus - in the genital tracts of men and women, and you find it in perhaps more than 80%.

So to all intents and purposes it is an extremely common thing, and it's not something that we get terribly alarmed about. It is important to know that there is this abnormality present, but not so important about the virus. Have you had any viral problems in the genital tract before?

C Genital warts.

I How long ago was that?

C About 12 years ago.
I About 12 years ago.
And that's the thing, this virus can attack, and we don't know why some people get warts, and some people get changes in the cervix, and most people probably get nothing at all.
So it does vary tremendously.
Have these warts all gone away now?
C Yes, I got them burnt.
I You had them treated at that time?
C Yes.
I Okay. The thing about this virus is that it may stick around, and it is a bit like cold sores, and the herpes virus. The cold sores can flare up from time to time, and it is possible that this virus can cause flare-ups in the condition, and this CIN may have been present for some time.
How long ago is it since you had your last smear?
C It's been 10 years.... too long.
I Is it? You've been hiding have you?! It's too long.
Yes, I mean we normally recommend that smears are done every three to five years as you know. But that last smear... was it a normal one, the one that was sent in years ago?
C Yes.
I It was. So this is the first time that you have had an abnormal smear?
C Yes.
I Okay, well what we can do is... it suggests this condition called CIN. And CIN is not doing you any harm at all. Left to its own devices it might just get better, or it might stay there... never get better but never get worse either; and your smears would always be abnormal from now on. Or it could be the sort of thing that turns into cancer if nothing was done about it.
C Yes.
I And that's why it is important to get after it, find it, identify that it is there, and then get rid of it. And there are a variety of ways in which we can get rid of it.
Some are very simple and straightforward, and we can do them in the clinic; and some involve a bit more than we can do here today.
The way that we treat this depends also upon your other problem, because you have got another appointment haven't you?
C Yes, for Monday.
I For Monday... that's right.
Well you won't have to keep that one because we'll deal with everything for you today.
But that other problem was that your doctor had noted at the time that the smear was taken, that the uterus seemed to be bulky.
C Yes.
I Or it was thought it was the uterus. Now can I just explain to you using this **diagram** up here Christine. This is the uterus up here at the top of the vagina... this is the cervix - the neck of the womb here... where the abnormal cells came from on your smear.
These are the tubes out at the top... and this is the ovary on either side.
When your own doctor examined you from below she could feel this mass in the pelvis.
Now maybe that the mass is in fact an enlarged uterus, or as your doctor suggests, it is quite possible that one or either of the ovaries has formed a cyst, and that cyst is filling the pelvis as a mass that she can feel as well.
C I see.
I We can't say for sure - and I will examine you as well.
But in addition what we will arrange is an ultrasound scan.
And the ultrasound scan can distinguish between the uterus or the womb, and the ovaries, and then we will know for sure what we are dealing with.
C Okay.

Colposcopic Examination

I When I take this cover away you will feel this light, it's a warm light, okay?
Do feel that warm on your tail end?
C Yes.
I That's grand, okay. On the other hand, the speculum here is a metal one okay?
So it will be cold... not too cold, but just colder.
There we are... and as you say... your period just started yesterday?
C Yes.

I It's not excessive, so it shouldn't interfere. There we are... okay?
 Now I'm just stretching the speculum just a little... there we are.
 Now I'm just going to gently mop dry... just try and let your bottom relax... that's it.

C It's a bit uncomfortable.

I Is that sore?

C No, I think it's just me as well.

I It's just you as well is it?... okay. Right, I'm just mopping dry. Now just going to paint inside with some dilute vinegar. That's grand. Try and just put your bottom back down on the bed. That's it... there we go... that's fine, just down on the bed again and just relax. And we just let that soak for about 45 seconds or so... all right. Right, now switch on the light... and what we see just now are the cotton wool balls... okay that's all you are seeing on the television, just the cotton wool. Now what I'll do is I'll remove that... just taking away the cotton wool and then I'm just going to mop dry... that's fine, just mopping dry... okay. And now we'll have a look at the cervix. The important thing is that there is no cancer here.

C No?

I Okay, no cancer here.

C Oh thank God!

I Right... now with this cotton bud...(shows patient)... Here it gives you an idea of the size, okay?

C Yes.

I Here's the cotton bud. If you look at the screen you will see the size. That's the entrance there into the uterus... into the womb.

C Oh yes.

I Okay?
 You can see that on the posterior wall here... just here... we are seeing some white skin.

C What... white stuff isn't it?

I Let me just get the focus better.... There we are. And you can see on the posterior lip at about six o'clock there is some slightly white... and the same on the anterior lip there. And that's all that there is.

C And that's good?

I That's the extent of the abnormality. It goes up into the canal, but I can see the top of it up inside there.

C So it's not bad?

I It's not bad. That's the explanation for your abnormal smear. It's just this condition called CIN. Let me just look inside the canal there... with the speculum. And what I'm seeing up in there is a normal pink endocervix. So there is no evidence of any cancer, and there is no serious abnormality there.

So what I'm going to do now Christine, okay, is take away the colposcope and remove the speculum, and just carefully take that out.
 Right? Now I'm just going to gently examine you inside, and see if I can feel this mass that your doctor was feeling. I'll just be very gentle with you because I know it's sore.
 So there we are, just relax... just pop two fingers inside the vagina... try and let your tummy go as soft as you can, okay?
 And I can feel this mass, and it is behind the cervix but it is difficult to distinguish it from the uterus. And she is tender and guarding a little, so I can't be certain.
 Okay, I'm just going to take my finger out and gently examine in through the back passage. Have we got some K Y Jelly there?

C I've got big piles.

I You've got big piles. You'd rather I didn't do that? Fair enough then, okay, I don't want to hurt you. All right, okay. What I'll do is I'll talk to you then once we've got the results of the scan.

Ultrasound Scan
Dr Sandy Christie

S They are not always both easy to see from here. That's why I said that sometimes we have to do the internal scan to find the other one.

C Today?

S No, no, no, we are not going to do that today, you are very tender.

S So we're just starting the examination.
And we can see in the centre of the picture here the **bladder** which is really quite small but it is beginning to fill. And if we now progress upwards... coming into view is a rather **well-defined and discreet cyst**.
There appear to be no **septae within the cyst**. The patient is rather tender, so we have to do this very lightly, and we can stop in this longitudinal section and take... measure the dimensions of this cyst which show it to be 107 by 97 mm in that dimension.
And if we rotate to 90 degrees we get the third dimension which is 102mm.
So it is almost a spherical cyst with no internal septae. Just coming over to the right a little bit... it's rather ill-defining but I can see the uterus in here just slightly anterior and to the right of the main lesion which is the cyst.

Well we've found the limits of the cyst. What I am going to do now is just to go round the periphery of the cyst with the **colour box** to see if I can pick up any peripheral flow around the cyst here. So I'm just moving it around.

It is set... the colour detection system is set for maximum sensitivity.

And as we go round with the colour box here, you can see that there is virtually nothing but a few little speckles of noise, but no discreet flow except for well outside.

You're a little tender, I'm sorry.

Okay, we are going right round and we have a negative result on that, and that's good.

Okay?

Now if you keep still just for a moment I'll see if I can pick up...

There is some flow out here, but this is over on the uterine side.

This is in the uterus and I'll just show you there the difference.

Here we can see there is a vessel here... which we can positively identify and obtain a spectral wave form. Quite difficult to see it...(sound)... we can... now there is very low flow in one of the uterine arteries, that is **uterine flow**, a very low flow, so there is nothing there abnormal about that.

And that's the only flow that we can find in the pelvis, in this picture.

Discussion: Dr Ian Duncan and Patient Christine

ID Okay Christine, so you've had your scan now, and what the scan shows is that we are dealing with an ovarian cyst and not with a mass in the uterus itself.. it's not fibroids in the womb.

Now as you saw on the scan, this cyst is about the size of a Jaffa orange.

It was about what we call 10 cms round.

And also on the scan we could see that it didn't have any blood vessels associated, and it looked quite clear inside, so it is just full of fluid.

Now **these are good signs**, there is no suggestion of any cancer there, that is just a **simple cyst**. What we don't know as doctors is what happens to these cysts.

We know that some of them just disappear and the patient never knows that it has been there. There are others that will persist, and some of them may eventually develop a cancer within them.

And it is important therefore to think about getting rid of this cyst.

There are different schools of thought - there are some who would advocate putting a needle into the cyst and taking out the fluid under the scan.

Just as you had the scan, put a needle in and take out the fluid, and let the cyst drop down that way.

C No!

I There is another school of thought that says well that's dangerous, because if there is just the **possibility of this thing being malignant or pre-malignant**, then there's the potential for spreading it if you do that. So they would advocate taking the cyst out intact, and I would belong to that school.

C Yes.

I I would be inclined to **take the cyst out intact**.

Now, the other ovary we weren't able to see on the scan because the cyst was filling the pelvis, so we don't know exactly what it looks like.

But **with your family history**, you might want to think about whether you'd want us to take **the other ovary out at the same time** as we take the cyst out.

We can... you don't need the eggs, and you are not planning on having any more pregnancies...

C Oh, it's the oestrogen...

I It's oestrogen, it's the hormones, that's right. But fortunately we can give you hormone replacement therapy in a variety of ways. You can take it by mouth as pills; you can have it as pellets which are renewed every so often; or you can have it as patches that are put on the skin.

C Will that cause breast cancer?

I There is some evidence, some evidence which is disputed, that there is some evidence that there is a slight increase in breast cancer in women who have taken hormone replacement therapy - the oestrogens, for a long period of time.

But you would normally have had these hormones in any case in your body up until you were 52 or 53, so you can think about it.

If we leave one ovary behind, with your family history of ovarian cancer there is a certain risk. **Women who have had one first degree relative** - that's a mother or a sister - with ovarian cancer, run a slightly increased risk of developing ovarian cancer.

The risk is very much more if they have had more than one relative with more than one first degree relative with ovarian cancer.

In fact in the UK we've got now a register of such families because these families need to be looked at, need to be scanned, need to be screened; and some of these women will elect to have both ovaries removed once they don't need the eggs from them.

C Yes. Even when they are still healthy?

I Even when they are still healthy. Just to make sure that they don't develop ovarian cancer in them. So if we are taking away one ovary, then you should consider whether we take the other ovary away as well and give you hormone replacement therapy at the age of what... 39?

C So that means a hysterectomy as such?

I Well taking away both ovaries is not a hysterectomy.

C No.

I Hysterectomy means taking away the womb.

C Yes.

I But if you are in there taking away the ovaries...

C You may as well take away the lot.

I Well in your particular case, you have got an abnormality in the neck of the womb which is not cancer, but it is something which could be pre-cancerous.

And if you had nothing else wrong with you, then we would have simply treated that in the clinic.

C Yes that would be perfect but...

I We could have dealt with that in the clinic. But on the other hand, there is no real advantage to you in retaining the womb... none.

And so if we take away the uterus at the same time, if we do a hysterectomy at the same time as we take away the ovary - what we call an oophorectomy - then you'd have nothing to bleed from. And in the terms of hormone replacement therapy, you would be able to take oestrogen without taking a progestogen with it.

You would just be able to take oestrogen on its own.

Now the advantage to you is that you have less of a problem than in terms of you don't have any withdrawal bleeds, you don't have cyclical bleeding.

You would have no more periods.

C Yes, I would have no more cramps.

I You would have no more cramps.

C (Sighs)... Yes I see, what a thought! I never thought... I thought when you said that it was on the ovary that that would mean just take that out, and everything would be fine.

I Yes, well it will be. I mean if we take away... we can.

I mean that the options are that we just take away the ovary... that one ovary... leave the other ovary, leave your uterus, and at the same time treat the cervix under the same anaesthetic. We could do that for you.

C What do you think is the best?

- I I would be inclined... I mean because there is no real value in having the uterus there, and there is some abnormality in the neck of the womb, then I'd be inclined to take the uterus...
- C Prevention is better than cure sort of thing?
- I Prevention is better than cure. I would be inclined towards total abdominal hysterectomy and taking away both ovaries, and giving you hormone replacement therapy.
- C Would you guarantee me that... because you know how they say that some people aren't suited for HRT. What if I was one of these people and I ended up...?
- I There isn't anyone who isn't...
- C The legs and the arms...
- I ... not really suited to HRT because HRT comes in a variety of shapes, forms and dosages. So that we can always tailor-make the actual treatment of HRT.
- C I see, so you couldn't sort of be left with no oestrogen?
- I No, no you won't be left with no oestrogen.
- C Oh, so that's not so bad.... oh dear!
- I Right. Well what we'll do is we'll talk about the timing of that, but we can do that separately.
- C Okay.

General Discussion

- DCA Ian, Christine is obviously quite a complicated patient. And amongst other things she illustrates the use of two modern investigative techniques. But first of all, how did she come to your attention in the first place?
- ID Well she is very interesting because she went along to her family planning clinic to take part in a routine cervical screening programme, and to have a smear taken in the family planning clinic. And the doctor who took that smear noted the presence of a pelvic mass and obtained a family history that **Christine's mother had died from ovarian cancer**. So she felt that she should be seen by a gynaecologist and referred her up to the clinic. And then the smear was reported as abnormal, and so a second letter of referral referring her for colposcopy was added to the first.
- D Right. Now obviously the two techniques really have been quite reassuring for her. And I presume that she would have been very worried about both findings. And perhaps you could discuss first of all the cervical pathology. CIN means what exactly?
- I **CIN stands for cervical intra-epithelial neoplasia**, and it is the modern terminology that we use for what was formerly called dysplasia. There is also another terminology called squamous intra-epithelial lesions or SIL, and these can break down into high-grade and low-grade. But in the CIN terminology we speak about CIN 1 as being low-grade and CIN 2 and 3 as being high-grade.
- C So potentially she might develop cervical carcinoma if this lesion was left untreated. Is that correct?
- I **The higher the grade of the CIN the more likely it is that the patient would eventually develop cervical cancer** sooner or later if nothing was done about it.
- D Right. Now in the history you mentioned the question of warts. What is the current position regarding the viral aetiology of cervical cancer?
- I Well the human papilloma virus exists in a very large number of forms. Now at the latest count there are more than 60 types. Some of these types have been associated with invasive cancers of the vulva, and the vagina, and the cervix, and other squamous tissues such as the larynx and the pharynx as well; and also the penis in men. **In terms of the cervix in women, which is the commonest form of squamous cancer, then the HPV 16 and 18 group are the ones which seem to be most at work here.**
- D Is that also in the same... or same viruses that cause the viral warts?
- I Yes, it can be but there are other sub-types such as the 6/11 group which do not seem to be associated with pre-malignancy or malignancy to the same extent.
- D Right. Now in fact if she didn't have the ovarian pathology, how would you treat her cervical lesion?
- I Well we know from the colposcopic examination that her cervical lesion is confined to the transformation zone, and it has the appearances of CIN. There are no characteristics suggestive of invasive cancer present.

So after a histological confirmation by biopsy, then we would have the option of either **destroying the transformation zone or excising the transformation zone.**

- D Now turning to her ovarian lesion.
Are you comfortable based on the ultrasound that this is a benign ovarian cyst?
- I Yes, I would think there is very little that points towards this being anything other than benign. Of course we won't know for sure until we get the histology. And once we have the histology we may get a surprise - we may find for instance that it is a borderline lesion. And a borderline lesion is a bit similar to cervical intra-epithelial neoplasia where there is neoplasm present but it is non-invasive. And the relationship between that and ovarian cancer at present is really unknown.
- D Does it influence you in your treatment the fact that her mother died of ovarian cancer?
- I I think it has to influence us in our treatment. Anyone who has a first degree relative who has had ovarian cancer, has an **increased chance of developing ovarian cancer themselves somewhere between five and ten times that of ovarian cancer** in the background population.
- D And what is the incidence in the background population?
- I **Well in women over the age of 45 it is of the order of 40/100,000 women per annum.** And below the age of 45 then the incidence is very much lower than that.
- D Obviously cervical screening is nation-wide in the UK. What is the situation vis-à-vis ovarian screening?
- I There is a fundamental difference between the two, because in cervical screening we are actually looking not for cancer itself but for precursors, which could develop into cancer, and which being amenable to treatment prevent the cancer from developing. On the other hand with ovarian cancer screening we are actually looking for an early form of cancer, in the hope that we can by treating it at that stage, prevent the patient from developing advanced disease.
- D And what are the techniques for ovarian cancer screening?
- I They are much more complicated than for cervical screening, and **we can only really apply them to a high risk population.** And a high risk population by definition is a population of women who have two first degree relatives - either a mother and sister, or two sisters - with a history of ovarian cancer. And these women would then be **subjected to annual ultrasonic examination and tumour marker measurements with serum CA 125.** Pelvic examination can be carried out as well, but probably adds comparatively little to the above two.
- D Right. Now she was very concerned and obviously in two minds as to which advice to take about the hysterectomy and oophorectomy. And one of her major concerns I think was related to whether she might not tolerate HRT. You sounded very confident that you feel you will find a method of HRT which would suit her.
- I I would think so. It is easier to give HRT or hormone replacement therapy with oestrogen alone if someone does not have a uterus. If someone does still have a uterus in place then the HRT is going to have an effect upon the endometrium, and may slightly increase the risk of endometrial cancer. And the way that we counteract that is by giving progestins. But giving progestins can have other complicating facts and may actually reduce some of the beneficial effects of the oestrogen.
- D And in fact although she is concerned about breast cancer, that possible increased incidence is probably more than offset by a reduced incidence of ischaemic heart disease¹.
- I I would certainly think so. And the work that would suggest a slight increase in the incidence of breast cancer is basically in women who have been taking hormone replacement therapy after the menopause, and who have been taking it for some time - certainly in excess of five years. Now Christine at the age of 39 might very well have another 10 to even 15 years before her natural menopause, and we therefore would be speaking about five years of HRT beyond that.

¹ note: later evidence is uncertain on this

So we are really speaking here about being able to give her 20 years of hormone replacement therapy without probably significantly increasing the likelihood of breast carcinoma.

But certainly giving her protection against ovarian cancer, and she has no other sisters, so we do not know whether there is any question of any strong family history here.

And it will certainly protect her if we do remove her ovaries, it will protect her from coronary artery disease²) and from osteoporosis.

D Giving HRT?

I Giving HRT. Certainly giving oestrogens.

D Yes.

I **There is some evidence that progestins actually reduce the beneficial effects of oestrogen** in that respect.

D Right. So on balance you feel that as she is going to have an operation, one would lean somewhat to encouraging her to have a hysterectomy and the other ovary removed.

I I would think so. The treatment for her CIN certainly can be conservative, but she's not planning on having any more pregnancies, and in that respect her uterus is not of any use to her. And certainly we would be removing the cervix which has got a potentially pre-cancerous condition in it at the same time.

D Right, thank you very much.

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