

Commissioner's Comment

Oral contraceptives and thrombosis

Ron Paterson, Health and Disability Commissioner



A young woman, Ms B, died as a result of pulmonary emboli from a deep vein thrombosis in her left leg. Ms B had a history of superficial thrombophlebitis and was being treated with a second-generation oral contraceptive for the control of dysmenorrhoea. Her father complained to HDC about the standard of care provided by Ms B's general practitioner, Dr C.

OC prescription for dysmenorrhoea

Thirty-nine-year-old Ms B was a regular patient of Dr C's medical centre. In December 2001, Ms B developed thrombophlebitis in a varicose vein in her right leg. Dr C prescribed Floxapen, Voltaren SR, and Hirudoid ointment, and the clot resolved without further incident.

In February 2002 Ms B consulted Dr C for treatment of her persistent heavy periods. Dr C knew that Ms B had previously been on a third-generation oral contraceptive for almost two years without incident, she was a non-smoker, and her blood pressure was normal.

Dr C informed Ms B about other treatment options including hysterectomy or a Mirena IUCD. He was 'absolutely clear' that he discussed the risks of going back on a combined oral contraceptive, and informed Ms B about the higher risk associated with a third-generation pill versus one of the low-dose second-generation oral contraceptives. Following this discussion, he prescribed a low dose second-generation oral contraceptive.

Dr C told me: *'I believe that in view of her history of long-term, incident-free use of a third generation oral contraceptive, the minimal nature of her thrombophlebitis, and her low risk profile otherwise, it was a reasonable and responsible action (to prescribe a low-dose second-generation pill).'* Dr C also stated his opinion that *'(a) superficial clotted vein is not a risk factor for the prescription of the pill... as it is not a risk factor for deep vein thrombosis... In my 25 years in General Practice, I have seen literally hundreds of superficial clotted veins, but not one has ever had an associated deep vein thrombosis.'*

Thrombophlebitis a risk factor?

An independent general practitioner advised me that prior to prescribing the oral contraceptive for Ms B, Dr C should have taken a comprehensive personal and family history to exclude contraindications, examined Ms B's varicose veins, documented her recent thrombophlebitis, and informed Ms B of the risks associated with taking the oral contraceptive, in the light of her personal risk factors.

My advisor noted that superficial thrombosis with thrombophlebitis, although not an absolute contraindication, is associated with an increased risk of venous thromboembolism and is listed as a risk factor for oral contraceptives. Dr C knew of Ms B's recent history of thrombosis with associated thrombophlebitis in a varicose vein, and this issue should have been 'specifically and carefully' discussed with her.

In fact, Ms B's statement that she was feeling 'much better' concealed the true extent of her illness

Guided by my expert's advice, I formed the opinion that Dr C had failed to provide Ms B with services of an appropriate standard, in failing to adequately review and discuss her personal risk factors prior to prescribing the oral contraceptive.

Shortness of breath and chest tightness

On 6 March 2002, Ms B experienced shortness of breath and tightness in her chest, and was seen at a health centre by the on-duty doctor. Ms B gave a history of being injured while lifting tiles a few days earlier. On examination, she had local muscle tenderness at the level of T6. The doctor diagnosed a vertebral facet strain and some muscle spasm and referred Ms B for physiotherapy.

The physiotherapy seemed to ease Ms B's pain a little, but progress was slow. After two weeks of physiotherapy, Ms B went to see Dr C complaining of ongoing pain in her back, a mild cough, shortness of breath and chest tightness. Dr C noted that Ms B looked 'surprisingly well'. On examination he noted scattered coarse crepitations with some expiratory rhonchi. Dr C thought Ms B's presentation had all the hallmarks of a mild to moderate asthma attack (she had a previous history of mild asthma). He prescribed prednisone and advised Ms B to increase her dose of Flixotide.

Two days later, on 27 March 2002, Ms B rang Dr C to check how often she could use her Ventolin inhaler. She told Dr C that she was 'feeling much better', and declined his offer of a medical review in his office or at her home.

'Not one to complain'

In fact, Ms B's statement that she was feeling 'much better' concealed the true extent of her illness. Ms B's partner would later tell the Coroner that at around this time Ms B 'could hardly get out of bed, she could barely make it to the bathroom. When she did she was out of breath.' Similarly, a friend stated: 'She complained of breathlessness and said she had stopped walking the dog and had trouble getting up the stairs. She said she was tired all the time. She said she had no energy which is so unlike her...She had got so bad that she asked for my help, which is not something she did easily.'

The Coroner concluded: 'In all of the evidence I gained the impression that Ms B was not one to complain, but bore her illness as best she could... The descriptions by those close to Ms B show how ill she was.'

At about 9pm on 29 March 2002, Ms B experienced extreme breathlessness walking up the stairs in her home and collapsed shortly after-

wards. An ambulance was called, but Ms B went into respiratory arrest before it arrived. Family and ambulance staff were unable to resuscitate her. A post-mortem report revealed that she died of lung infarction due to pulmonary emboli from a deep calf vein thrombosis of her left leg.

Missed diagnosis not culpable

In relation to Ms B's chest problems, my expert advised that Dr C's assessment and management were consistent with the standard of a competent doctor. Ms B's symptoms were consistent with asthma secondary to a chest infection, which she had suffered in the past, and Ms B did not report any leg swelling, which would have made the diagnosis significantly easier. Dr C had no reason to suspect that Ms B was suffering from a life-threatening condition. Dr C told me: *'I was totally fooled by her lack of signs and symptoms, and by her repeated assurances that she was feeling much better and did not require a medical review.'*

In the light of this information, I formed the opinion that Dr C's assessment and management of Ms B's chest complaints were of an appropriate standard, and did not amount to a breach of the Code.

Ms B's case is a useful reminder of the importance of reviewing and discussing a patient's personal risk factors before prescribing oral contraceptives. If Dr C had raised the issue of the recent thrombophlebitis, Ms B may have chosen to take the oral contraceptive anyway, but at least the decision would have been a properly informed one. Ms B's case also serves as a sad reminder that a patient who is 'not one to complain' may fail to provide you with potentially life-saving information. Had Ms B told Dr C of her swollen left leg (discovered at autopsy), and the true extent of her chest pain and breathlessness, Dr C may have had a window of opportunity to diagnose the embolisms and possibly even save her life. The full report (03HDC00837, 02/12/03) may be viewed at www.hdc.org.nz/opinions/2003.