

Women in Diving

About diving, menstruation, pregnancy and other issues female divers would hope to know

Diving and Pregnancy

The first question is the most obvious, and most frequently asked when it comes to a lady diver: "Can I dive if I am pregnant?" The short answer to this is, sadly, "No".

This is one of those burning medical/ethical moot points that founders on theoretical chance. No research has been done on the pregnant diver and the effects of DCS because it would not even get through the door of the medical ethics committee.

Scientists may have bunged a few goats and pigs into the depths, but we have learned that animal model results do not always transfer to humans.

So here's the deal with diving and pregnancy: On any dive, whatever the depth, there is always a risk of getting a bend. Nitrogen has an affinity for nerve tissue, especially in the spinal cord. In fully grown adults there is the ability (however limited) to regenerate and heal; if you were to suffer a bend, a paralysis could often get better with little long term effects. But imagine the situation if a developing foetus were to get a bubble in the spine. If the mother had no symptoms then the baby could easily go untreated, with potentially disastrous effects at birth and later in life. The parents would never forgive themselves. So I say to pregnant mothers, please do not dive, just wait the nine months. You will sleep a lot better knowing you waited.

The same precautions should be taken for those trying to get pregnant as well. Though this is an issue that has not been researched at all, the risks are simply not worth taking. However, if a diver has taken a long trip with plenty of dives on a live-aboard, returns home only to discover that the little test strip has turned blue, what then?

I always suggest that the mother-to-be not worry because the risks are minute. But if she exhibits any sign of DCS, then I recommend she seek treatment as soon as possible. If there are any concerns later, and she just needs peace of mind, then an ultrasound is a good way of confirming developmental normality.

Child Care

After the little scamp is born, who gets to hold the baby? A good, sensitive dad. I have often persuaded my partner to hold the lad whilst I did the first dive (with the pretext that she would do the second). By the time it is the second dive she is usually too tired to go anyway, and so I go again...

Enough sexism! In reality the issue I am dealing with is when it is safe to return to diving after giving birth. If it is a normal vaginal delivery, then the mother can return effectively straight away; but if it is a Caesarean, I suggest keeping out for at least four weeks: the cut through the abdominal musculature needs at least four to six weeks to return to full strength.

This issue reflects more of a "good buddy" position than anything remotely physiological. As a buddy you must always be in a good enough physical state to dive; for a post operative of this nature doctors agree this is the accepted time that should allow you to recover, and be physically fit enough to be able to haul your euphoric husband up from the depths and onto a boat, if there were problems.

A Touchy Subject

Breastfeeding is another question I have been asked about frequently. There is no problem at all for the lactating mother to go back underwater. However, if you are new to coldwater dives, and have never worn a dry suit, then do not wait until you have milk-engorged breasts to give it a go for the first time.

A dry suit squeeze could easily be messy and painful. So I suggest staying in a wetsuit, expressing your milk into a bottle and handing it to your husband to hold on the jetty as you shout directions on when to use it. Either that or demand a warm water vacation; you deserve it, and should settle for nothing less!

Whilst on the subject of breasts, women often ask me about implants, silicone-filled sacs that give some women that breathless Baywatch look. The debate of implants and pressure was brought to the forefront in the news years ago when a few unexplainably exploded on air flights. The reality here is that the silicone or water filled breasts are uncompressible, like any other fluid filled cavity in the body. So, if you are debating spending a few dollars with the plastic surgeon, it should not effect your diving. (That old wetsuit may not fit anymore though.)

Timing is Everything...

On a more serious note, there is talk amongst the diving medical fraternity about the other thing that the moon seems to affect (apart from tides): Periods.

It is becoming increasingly more obvious that women seem at greater risk of getting a bend if they dive during their menses. After all, a fraction less blood volume may make a difference. It could even be related to hormonal changes, or the blood's ability to clot. There has been a lot of research in the UK as to why this may be; however, the results are not forthcoming.





Every female diver hit with DCS in the UK has been asked to fill in a form stating whether she was menstruating at the time. While doctors still await the full results, I have a bit of anecdotal evidence to turn to: Having treated over 100 female divers with DCS in the last couple of years, I found that about one in four were menstruating.

That seems abnormally high, right? Unfortunately, we have to take a look at the statistics to really determine what this reveals. Most UK divers go for a week of diving; now the chances of that week occurring at the same time as menstruation are also one in four. Is my evidence revealing? I will let the mathematicians figure that one out.

My personal belief is that having a period is not the only factor, but one that may have tipped the scales. Often this bent diver, diving well within tables, has had a bout of diarrhoea, been a little dehydrated from heat and a hangover, and so struggled with a "heavy" dive. So the bend is probably a cumulative effect when coupled with other factors.

What about Sharks?

There are other inconveniences that involve diving and menstruation. In fact, one of my first email inquiries was: "Can I go shark diving if I'm menstruating?" The answer is a resounding "Yes."

There has never been a recorded shark attack due to menses. Urine, yes, because it is a fear-and-distress response which can attract sharks; but never a period. You may have to be wary with bull seals during their breeding season, though.

There was an incident where an Italian girl, experiencing her menses, was snorkelling in Baja Mexico, when a bull seal got her "scent". The amorous male grabbed her with his flippers and took her down to 10m in a seal-like bear hug. A diver at the scene, realising who the protagonist of this odd tryst was, saved the seal from being stabbed in the eye with a snorkel. On the surface the young girl was evacuated for shock (and embarrassment).

There is a way of postponing the period if it is expected during a dive trip. The drug norethisterone, if taken three times a day, can delay a period for as long as the woman likes. So it could be used for a week, if necessary. This is however for those who are not taking "The Pill". For those who do, simply start the following pack immediately without the seven-day break. This is called tri-cycling, and you can do it over a maximum of three-months' worth of tablets.

Honey, Do I Look Fat?

One of the other issues of gender differences and the deep has to do with body fat ratio. For a standard Body Mass Index [which measures a ratio of height to weight] a woman has more fat to muscle than a man. The effects of this make little real difference to a dive, but remember that nitrogen does have an affinity for fat. So if there are circumstances where nitrogen loading may be higher, such as an energetic dive, or where offloading may be slower - like in dehydration - then ladies, please be more aware.

Most tables are based on using healthy, extremely fit naval divers who, by dint of the job, were male. So in any circumstance where you may affect on and off gassing, then always use a longer safety stop. In fact, spend as much surface interval time as possible.

And another little tip, too: try to leave that really hot shower straight after a dive until later in the evening. Hot water causes peripheral vasodilatation, so more blood flows to the skin and away from other organs. This can reduce the nitrogen off gassing from these organs, and potentially create a bend. I'm not saying that a woman is more likely to have a hot bath sooner than a man, but experience tells me that the guys tend to sit around swapping "who saw the bigger shark" tales (with a beer) more often than the opposite sex straight after surfacing.

Etc etc.

There are a host of other issues I have written about before in these pages. Women in a state of dehydration are more likely to get a bladder infection that can ruin a live-aboard trip. So it is a good idea to pack some antibiotics like cephalexin or trimethoprim, if you are prone to this annoying infection.

There is also a tiny chance of increased likelihood of a deep vein thrombosis if you are taking a certain brand of "The Pill" called third generation pills. If you are taking a long flight, please also take an aspirin. In fact, I know that some diving doctors often take an aspirin before a dive; a bubble, among other heinous effects, can cause increased clotting around its surface. So if you have a family history of DVT and are on the pill it may be wise to take a 75mg tablet daily with any intense diving. (Check with your local diving doctor.)

Excerpts of an article by Dr Jules Eden