



# ISOT Newsletter

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## Editorial

### A Beacon of Hope: The Progress and Prospects of Liver Transplantation in India



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As a liver transplant surgeon, I frequently find myself at the centre of a tumultuous war between life and death, with each scalpel stroke a monument to the human spirit's awe-inspiring resilience. The area of liver transplantation has undergone significant expansion, particularly in India, mirroring the growing rise of liver disease, and I am honoured to be a part of this critical transition.

Today, I wish to discuss the journey we have undertaken in the field of liver transplantation in India, providing insight into the transformative progress, current advances, future prospects, policy frameworks, and potential for public-private partnership in the field. Firstly, it is essential to appreciate our humble beginnings. Our journey from a single centre in 1998 to over fifty centres now active across the nation is a story of determination and innovation.

Despite the substantial challenges of the initial period, we have witnessed considerable growth in various aspects of liver transplantation. In India, we have seen significant strides in deceased-donor liver transplantation (DDLT), living-donor liver transplantation (LDLT), and, more recently, domino liver transplantation (DLT). Our nation has become a global

leader in LDLT, thanks to the pioneering work of several transplant centres and advancements in microvascular techniques and immunosuppressive therapies. Equally impressive is our expansion in DDLT, which has been made possible by improvements in infrastructure and growing public awareness about organ donation. Our survival rate post-transplant is indicative of advancements in surgical technique and post-operative care.

Table 1: Liver transplantation trend from 2012 to 2021 in India

Year	Deceased-Donor Liver Transplant	Living-Donor Liver Transplant	Total	PMP
2012	87	783	870	0.69
2013	240	658	898	0.72
2014	325	1,002	1327	1.05
2015	498	1,118	1616	1.23
2016	694	1,059	1753	1.32
2017	579	1,264	1843	1.38
2018	631	1,313	1944	1.44
2019	599	1991	2590	1.89
2020	291	1,487	1778	1.29
2021	482	2,363	2845	2.04

Source : <https://www.transplant-observatory.org/>

The above table provides a thorough examination of the evolution of liver transplantation procedures, encompassing both living and deceased donors, from 2012 to 2021. It clearly demonstrates the constant increase in the frequency of deceased-donor transplants while also emphasizing the fact that transplants facilitated by living donors have consistently held numerical supremacy each year. Furthermore, as demonstrated by the trend in per-million population (PMP) rates, the quantitative evaluation demonstrates a continual growth pattern in total liver transplant surgeries. By 2021, the field had reached a critical milestone, with an unprecedented amount of 2,845 procedures performed at a PMP rate of 2.04.

Thus, reflecting on the past decade, it is evident that the outcomes of liver transplantation in India have seen notable enhancement. Evolution in surgical techniques, enhanced anaesthesia practices, advancements in critical care, and more effective immunosuppression regimes have collectively led to more favourable survival rates as well. The evidence is in the numbers: one-year patient survival rates after liver transplantation have been reported at an encouraging range of 80% to 90% or even higher. The five-year patient survival rates have followed suit, averaging between 60% and 70%. Even the graft survival rates are heartening, with one-year rates ranging from 70% to 85% or higher and five-year rates reported to be around 50% to 60% or higher. Complications are fewer thanks

to breakthroughs in understanding transplant immunology, innovative diagnostic techniques, and superior post-operative care. Consequently, liver transplantation is now recognized as a standard therapeutic option for patients grappling with end-stage liver disease in India.

Our progress is also underpinned by effective public policy. The Transplantation of Human Organs Act (THOA), first implemented in 1994 and later amended in 2011, has helped maintain ethical organ transplantation in India. More recently, various state governments have introduced health insurance schemes, providing aid to economically disadvantaged patients requiring transplantation.

In the future, public-private collaborations could be the key to the industry's expansion. These collaborations can encourage training programs for healthcare workers, increase the rate of organ donation, and strengthen the nation's healthcare system. Innovations and technological advancements are also critical to the future of liver transplantation in India. Machine perfusion, a promising innovation, aims to improve organ preservation and reduce reliance on ideal organ donors. The future also holds promise for further improvements in patient outcomes with advances in the fields of genomics, proteomics, and cellular therapy.

Despite our success, we still face tremendous hurdles. In India, the current rate of organ donation falls short of the demand. Furthermore, the lack of a comprehensive national organ allocation system, as well as the need for more uniform data reporting among transplant centres, are obstacles that must be overcome. "What lies behind us and what lies before us are tiny matters compared to what lies within us," said physician and poet Oliver Wendell Holmes. Our medical fraternity's inherent resilience, persistence, and innovative spirit will serve as the foundation for overcoming these problems.

As we move forward, it is on to us as doctors, decision-makers, and society to address these problems, increase accessibility, and boost results for people in need. Remember, the future of liver transplantation in India will be shaped by the combined efforts we make today. Let us work together to keep the light of hope alight for the many lives that rely on our skill, devotion, and compassion.

## Editor's pick

### Battling Organ Discard in Renal Transplantation: A Global and Indian Perspective



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*"Our bodies are gardens – our wills are the gardeners." – William Shakespeare.*

**Key Highlight:** The stark reality of organ discard in renal transplantation poses severe challenges worldwide, and the scenario in India particularly demands immediate attention and improved practices.

#### The Global Crisis of Organ Discard

As the world population faces an increasing burden of end-stage kidney disease (ESKD), the demand for kidney transplantation has outstripped donor organ supply.<sup>1</sup> However, a lesser-known part of this problem is the alarming rate of organ waste, in which obtained kidneys are deemed unsuitable for transplantation. Although organ discard is often justifiable due to worries about the potential recipient's health, it nonetheless represents inefficiencies in the transplant system that may be addressed to enhance patient outcomes globally.

In the United States, between 17-20% of deceased donor kidneys are discarded, which translates to several thousands of potential lifesaving transplants lost.<sup>2</sup> Even high-quality organs are sometimes discarded due to a myriad of reasons, including the perceived risks of transmission of diseases, logistics and organ preservation challenges, and regulatory policies.<sup>3</sup>

#### Organ Discard in India: A Unique Challenge

In India, the landscape of renal transplantation and organ discard is different but equally concerning. India has a high prevalence of chronic kidney disease (CKD), with a significant proportion of these individuals advancing to end-stage renal disease (ESKD).<sup>4</sup> However, organ donation rates remain strikingly low, due to cultural and religious beliefs, a lack of awareness, and infrastructural deficits,<sup>5</sup> hovering around 0.8 per million populations (PMP), compared to Spain's 46.9 PMP, a global benchmark.<sup>6</sup> The unfortunate result is a burgeoning organ discard rate, particularly for deceased donor kidneys, largely attributed to logistical

issues and delayed procedural timings, resulting in a paucity of efficient organ procurement and allocation processes.

### **Economic Implications of Organ Discards**

Organ discards represent not only a loss in terms of potential lives saved but also significant wasted economic resources. Each organ discard incurs costs related to procurement, preservation, transportation, and allocation, without any health gain. Moreover, organ discards contribute to longer wait times for transplantation, thereby increasing the cost of dialysis care for patients with ESKD. The estimated cost savings from transplant versus dialysis are approximately \$250,000 per patient over five years.<sup>7</sup>

### **Strategies to Reduce Organ Discard**

A critical examination reveals several areas for intervention to decrease organ discard and improve transplant outcomes. At the core of these strategies is the reassessment of the current organ acceptance criteria. As has been done in France, expanded acceptance of ECD kidneys could substantially reduce organ discard rates.<sup>8</sup> The safety-net kidney allocation policy has emerged as a promising strategy to reduce organ discard rates. This policy directs organs that would usually be discarded due to immunological or other reasons to patients who are less likely to receive a transplant. By doing so, it ensures that a broader patient population has access to transplants, enhancing the usage of available organs and decreasing discard rates. On the technological front, advancements in organ preservation techniques like hypothermic machine perfusion (HMP) and normothermic machine perfusion (NMP) have shown promise in improving the viability and function of donated kidneys. By reducing the cold ischemia time and maintaining organ quality, these techniques have contributed to reducing organ discard rates and improving transplant outcomes.<sup>9</sup>

In the Indian context, while expanding the donor pool remains a priority, significant potential lies in enhancing infrastructural capabilities and improving coordination among organ procurement organizations. Addressing these issues can help reduce organ discard resulting from logistical delays.<sup>10</sup>

Moreover, awareness programs aimed at promoting organ donation and dispelling myths associated with it are also paramount. One inspiring trivia here is the impact of public figures and celebrities in India championing the cause of organ donation, helping raise awareness and alleviate fears around the process.

### **Fighting the Battle Against Organ Discard: Success Stories from Around the World**

Indeed, combating organ discard is not a losing battle, as numerous success stories globally illustrate. Spain and Portugal have notably been successful in reducing their organ discard rates.<sup>6</sup> Their strategies include nationwide awareness campaigns, employing dedicated transplant coordinators in hospitals, and introducing opt-out systems of organ donation that presume consent unless explicitly denied. This has led to increased organ donation rates and improved transplantation outcomes. A distinct example comes from the United States,

where a new kidney allocation system was implemented in 2014 to expand the use of ECD kidneys. The model takes into account the compatibility of the kidney's lifespan with the recipient's estimated post-transplant lifespan, thus improving the utilization of ECD kidneys.<sup>11</sup> This system has reduced organ discard rates and improved patient outcomes. In another instance, the Netherlands has effectively used kidney perfusion pump technology in renal transplantation to enhance organ preservation, thereby reducing discard rates. Through the technique, the time that kidneys could be preserved outside the body was extended, enabling surgeons to assess organ quality better and match the organ to an appropriate recipient.<sup>12</sup>

### Conclusion

The issue of organ discard in renal transplantation requires immediate and focused attention. While the problem is global, its implications are more pronounced in regions like India. However, through comprehensive and context-specific strategies, we can reduce organ discard, improve transplant outcomes, and turn the tide on the kidney disease epidemic.

Let us remember, each discarded organ is a lost opportunity for someone awaiting a life-altering transplant. Each of us can contribute to reducing organ discard by pledging to donate and advocating for improved organ allocation and preservation.

*"To deny people their human rights is to challenge their very humanity. To discard an organ that could give life, is to challenge the very essence of life."*

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## Resident's Corner

### Conglomerate of Viruses: A Post-Transplant Perspective



**Dr. Priyash Tambi**

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Viral infections in post-transplant patients are like bumpers on the smooth road of the graft. If you do not look out for them, they may hit you hard and cause damage that is beyond repair.

I have been working in the IKDRC-ITS hospital in Ahmedabad for more than two years now, and this being a high-load transplant centre, it is very common for us to see post-transplant infections, in particular viral infections. The names of viruses that we learned in theory during the MBBS microbiology classes have actually come to life for me. These fancy names of cytomegalovirus (CMV), parvovirus, and even B.K. virus (which most people still do not know; the name is derived from a post-transplant patient whose urine showed the presence of this virus) have been a regular diagnosis in our files. To my surprise, a patient presenting with mild diarrhea with leukopenia and a diagnosis of CMV who also had mild anemia on evaluation turned out to be parvovirus positive as well. Similarly, BK virus infection is also commonly seen in patients with CMV. Even the diagnosis of Epstein-Barr virus (EBV) is not unheard of with them.

What I have learned from personal experience is that whenever you get a diagnosis of one of these viral infections, always look for others with the slightest of doubt, as when one

attacks, another is just waiting for its opportunity. Diagnosis is important, as even if the general approach remains a decrease in immunosuppression, each condition requires its own treatment. Delay in diagnosis and treatment may lead to serious infections and graft dysfunction, even in the hands of the best transplant physicians.

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## Women in Transplantation

**"The Dual Paradox: Women's Rise in Nephrology and the Persistent Gender Disparity in Transplantation"**



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When I started my nephrology career 40 years ago, I was one of just five female nephrologists in India. Today, there are 350–450 women practicing nephrology in this country. This transformation is not unique to the field of nephrology. Women are stepping out of their "shells" and asserting their presence across all sectors, such as science, politics, sports, and administration. They are equalling or even surpassing men in all these areas.

Women no longer feel that they need support; in fact, it is now men who are looking to women for financial, social, or emotional support.

What has brought about this change? Is it just increased literacy? Perhaps not. There is also a shift in perceptions. Societal norms no longer bind us. Even within the institution of marriage, there is a more liberal mindset. As long as mutual love and respect exist, there is no need to be bound by traditions. This approach seems to be working, and women appear to have become genuinely "liberated."

Yet, why does gender disparity persist in the field of transplantation? Why are most donors female and most recipients male? Is this a universal phenomenon? There are no clear medical or social reasons for this disparity. It is true that women often have a natural inclination to "give," and voluntarily donating a kidney to a loved one is seen as a noble act. However, pressuring women into donating should be strongly opposed. Women must be treated and respected on par with men in the delivery of healthcare.

Literacy is one part of the solution to this situation. The efforts of TTS in establishing the WIN initiative are commendable and could provide a significant contribution towards ensuring gender equality in the field of transplantation.

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## Featured Article

### Pregnancy Post-kidney transplant: A calculated risk or a smooth ride? All questions answered.



**Dr. Divya Bajpai**

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Mrs. Asha is a 32-year-old renal allograft recipient who received a kidney from her mother six months ago. Her native kidney disease was IgA nephropathy. She had immediate graft function, which has remained stable since then. She wants to understand how she can safely plan a pregnancy. Let us try to understand the various challenges in her way and the solutions that can be offered.

#### **Q: Kidney disease significantly decreases fertility. Is it possible for kidney transplant recipients to get pregnant?**

The loss of fertility in kidney failure is due to disturbances in the hypothalamic-pituitary-gonadal axis leading to hypogonadism, which is, to the greatest extent, reversed by successful kidney transplantation. Gonadotrophins, prolactin, and estradiol are rapidly normalized within six months.<sup>1</sup> This increases the chances of unplanned pregnancy in transplant recipients, so they must be actively counselled for contraceptive use.

#### **Q: Which are the contraceptive methods of choice post-transplant?**

All transplant recipients should be counselled about the use of effective contraceptives. Estrogen-containing contraceptives are best avoided in the first six weeks post-transplant due to the risk of thromboembolic events. Long-acting reversible contraceptives like intrauterine devices and progestin-releasing implants are preferred. Progestin use is associated with reduced bone density; thus, regular monitoring is needed. Barrier methods are safe, but they are the least effective contraceptives and have high failure rates.<sup>2</sup>

#### **Q: What is the optimum timing for pregnancy post-transplant?**

In the absence of risk factors, it is ideal to conceive after the first-year post-transplant (older reports suggest a waiting time of 2 years).<sup>3</sup> At this point, the woman is most likely at the nadir doses of immunosuppression with less risk of rejection and has completed prophylactic antiviral drugs.<sup>4</sup> Optimal graft function is defined as serum creatinine < 1.5 mg/dL with no or minimal proteinuria, which must be stable over time. The patient must be on stable, non-teratogenic immunosuppression. In women with cytomegalovirus (CMV) infection, it is advisable to delay pregnancy by six months to one year from the resolution of the CMV disease.

### Q: What constitutes adequate preconception counselling and care?

Preconception counselling must begin in the pretransplant period with advice on contraception. The family must understand that pregnancy post-transplant is high-risk and requires a multidisciplinary team approach. All women must undergo a thorough evaluation to gauge their risk status (Figure 1). They should be vaccinated against influenza, tetanus, pneumococcus, hepatitis B, and the human papillomavirus. Live vaccines against measles, mumps, rubella, and varicella are contraindicated post-transplant and should be given before the transplant. Women desirous of conception must be taken off mycophenolate mofetil and mTOR inhibitors (sirolimus/everolimus) at least six weeks before conception. Switching patients on these drugs to azathioprine 3-6 months before conception is ideal to ensure stable graft function before conception.<sup>5</sup> The safety of belatacept during pregnancy is not known. Serum creatinine and proteinuria must be closely monitored as the woman plans conception.

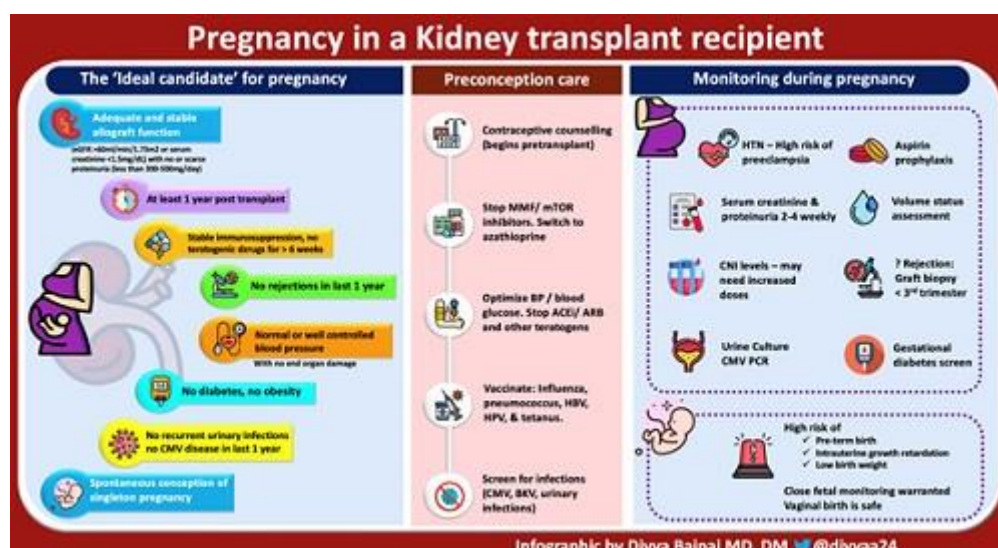


Figure 1: Pregnancy in a kidney transplant recipient

### Q: What are the risks to the mother during pregnancy?

According to the available evidence (mainly from the developed world), maternal mortality rates are comparable to those in the general population.<sup>6,7</sup> However, kidney transplant recipients are at an increased risk of preeclampsia (24% to 38%) compared to the general population (3% to 4%).<sup>8-10</sup> Severe preeclampsia is associated with acute graft dysfunction, placental abruption, stroke, hepatic failure, pulmonary edema, encephalopathy, and maternal death.<sup>9</sup> Women with chronic hypertension are at higher risk of developing secondary preeclampsia, which must be diagnosed promptly. Maternal hypertension and compromised graft function (pre-pregnancy serum creatinine >1.5mg/dL and proteinuria) have been consistently associated with adverse obstetric outcomes.<sup>9,11</sup>

Some, but not all, studies have reported increased rates of gestational diabetes in pregnant transplant recipients<sup>12</sup> which, if untreated, can lead to congenital anomalies. Risk factors

for gestational diabetes include obesity, CNI, and high-dose steroid use.<sup>9</sup> Pregnant women are at high risk of urinary tract infections and need routine screening with urine cultures. The risk of cytomegalovirus (CMV) infection is highest in seronegative women who have received a seropositive graft. Testing with CMV PCR is recommended in pregnant recipients, especially when there is new onset leukopenia.<sup>13</sup>

**Q: What are the fetal outcomes in pregnancy post-transplant?**

Most studies have reported that live birth rates are comparable to those in the general population.<sup>6,9</sup> Some studies have reported higher stillbirth rates in transplant recipients, with maternal age being a significant predictor of the same.<sup>14</sup> Higher rates of preterm birth are reported, with risk factors including maternal hypertension and baseline graft dysfunction.<sup>4,8,9</sup> Transplant pregnancies are also more likely to have a low birth weight (< 2500 g) and fetal growth restriction.<sup>8,11</sup> Adverse fetal outcomes like preterm birth, low birth weight, and growth restriction significantly increase neonatal mortality and morbidity. Low birth weight is associated with a higher likelihood of long-term complications like developmental deficits, diabetes, hypertension, and cardiovascular diseases in adulthood.<sup>15</sup>

**Q: What are the kidney allograft outcomes in pregnancy post-transplant?**

The usual pregnancy-related increase in glomerular filtration rate (GFR) is blunted in transplant recipients, and thus, most recipients do not have a mid-pregnancy fall in creatinine.<sup>8</sup> Also, transplant recipients show a greater rise in urine protein excretion due to hyperfiltration compared to non-transplant mothers.<sup>16</sup> Reported rates of graft rejection are comparable with those of non-pregnant recipients.<sup>6,9,14</sup> Women who are sensitized or have fluctuating levels of immunosuppressive drugs (pregnancy-related disturbed pharmacokinetics) have a higher risk of graft rejection.<sup>17</sup> Long-term graft outcomes in those with a well-functioning graft preconception and transplant after the first year are comparable to non-pregnant recipients.<sup>6,16,18,19</sup>

**Q: What monitoring is required during pregnancy? Also, suggest the optimum management strategies.**

Close monitoring by transplant physicians and obstetricians is warranted throughout the pregnancy, the frequency of which is guided by baseline allograft function and obstetric complications. Most recipients need a follow-up every 2-4 weeks until the near term and frequently increase thereafter.<sup>20</sup> Some visits can also be completed using telemedicine.<sup>21</sup> Surveillance for hypertension, gestational diabetes, infections, and graft rejection is needed. Unbound tacrolimus concentrations must be monitored as they increase during pregnancy while whole blood concentrations decrease.<sup>22</sup> Tacrolimus doses might need to be increased accordingly. Maternal screening for various complications in pregnancy is described in Table 1.

**Table 1: Possible complications in pregnant kidney transplant recipients and their management**

Complication	Management
<b>Hypertension</b> Crucial to differentiate between preeclampsia, chronic hypertension, and rejection.	<ul style="list-style-type: none"> <li>- Target blood pressure is not established</li> <li>- Target &lt;140/90 mmHg are acceptable<sup>20,4</sup> without CV disease</li> <li>- All recipients must be on low-dose aspirin preeclampsia prevention<sup>20</sup></li> </ul>
<b>Graft dysfunction</b>	Detailed evaluation includes <ul style="list-style-type: none"> <li>- Volume status assessment</li> <li>- Urine analysis</li> <li>- CNI levels [keep close to pre-pregnancy levels]</li> <li>- Ultrasonography of graft</li> <li>- Graft biopsy → generally safe before 3<sup>rd</sup> trimester</li> </ul>
<b>Graft rejection</b>	Augmentation of baseline immunosuppression is needed. <ul style="list-style-type: none"> <li>- Methylprednisolone (for cell-mediated rejection)</li> <li>- IV Ig [intravenous immunoglobulin] and plasmapheresis (for antibody-mediated rejection)</li> </ul> Data about the safety of rituximab and anti-thymocyte globulin [ATG] is limited
<b>Gestational diabetes</b>	<ul style="list-style-type: none"> <li>- Optimize steroid dose</li> <li>- Optimize the CNI dose</li> <li>- Insulin and nutritional therapy</li> </ul>
<b>Urinary tract infections (UTI)</b>	Screen for asymptomatic bacteriuria every 2 -4 weeks. <sup>23</sup> Treat with appropriate antibiotics [tailored to sensitivity results]  Continue antibiotic prophylaxis till delivery
<b>Cytomegalovirus infection</b>	<ul style="list-style-type: none"> <li>- Screening is required if clinically indicated (Weak recommendation to perform surveillance testing every trimester).</li> <li>- Diagnosed mothers to be screened for congenital CMV in neonates.</li> <li>- No safe and proven therapy for CMV in pregnancy, but CMV hyperimmune globulin can be used in selected cases.</li> </ul>

Vaginal delivery is the preferred mode of delivery, and Caesarean delivery should be considered only for obstetric indications. Obstetricians must know the anatomy of the transplanted kidney and ureter before a Caesarean section.

Fetal monitoring is like that in non-transplant pregnancies. Cell-free fetal DNA testing, which can be used in non-transplant mothers to detect fetal aneuploidy, is not advised in transplant recipients because of the chimeric state due to the kidney allograft.

#### **Q: What are the postpartum considerations for transplant recipients?**

A pregnant woman is a chimera with three different tissue populations, with the placenta being the primary driver of tolerance, and its loss can theoretically trigger rejection.<sup>20</sup> Thus, monitoring graft function is also crucial during the postpartum period.

Although data is scarce, prednisolone (5–10 mg/day), azathioprine (1.5–2 mg/kg/day), and CNIs are considered safe during lactation, and breastfeeding is encouraged in all transplant recipients.

After the counselling session, Mrs. Asha understood that pregnancy post-transplant is high-risk. However, a successful outcome is possible with adequate preconception planning and close follow-up with the transplant physician and the obstetrician.

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## In the News

### **Dáithí's Triumph: The Story of a Life-Changing Law and Hope for Organ Donation**

Greetings, healers, and health enthusiasts! We are journeying to the beautiful landscapes of Northern Ireland today to share a heartwarming tale about organ donation and the inspiring story of a brave little boy, Dáithí Mac Gabhann. His journey has revolutionized organ donation laws, leading to the creation of a groundbreaking piece of legislation, aptly named Dáithí's Law. [1] Intrigued? Well, let us uncover this compelling story together!

June 1 holds a special place in the heart of Northern Ireland as it marked the implementation of a transformative piece of legislation known as Dáithí's Law, or formally, the Organ and Tissue Donation (Deemed Consent) legislation.[1] This isn't just an average law. It has rewritten the rules of organ donation consent in a way that has the potential to save countless lives.

This law now makes all adults in Northern Ireland potential organ donors, unless they consciously decide otherwise or belong to an excluded group. Minors under the age of 18, those unable to understand the legislation, and transient inhabitants are all included in this.[2] Consequently, the organ donation procedure has shifted from "opt-in" to "opt-out," heralding a new era. Do you agree that it is revolutionary?

A startling fact—that there are over 140 people in Northern Ireland on a transplant waiting list and that, heartbreakingly, 10-15 of them pass away each year—was the driving force behind this change. In 2022, thanks to 59 generous donors from Northern Ireland, 96 fortunate patients received life-saving transplants, and a total of 140 transplants were carried out across the UK. But more needs to be done, and that's where Dáithí's Law steps in.

Permanent Secretary at the Department of Health in Northern Ireland, Peter May acknowledged: "We know that the vast majority of people here say that they support organ donation in principle, but many people still haven't got round to signing the NHS Organ Donor Register or telling their families." Dáithí's Law seeks to fill this void, following in the footsteps of similar legislation enacted in Wales, England, and Scotland. [1]

You may be curious about the small kid who inspired the law's name. Dáithí Mac Gabhann, our story's hero, has been waiting for a heart transplant since 2018. On June 1, he will have been on the waiting list for five years. His family's tireless efforts and steadfast commitment to advocating for organ donation prompted this momentous legislative reform.

As the law was being enacted, Dáithí's father, Máirtn, reflected, "As a father, there are few moments in life that can compare to the pride and joy I feel for my son Dáithí on this momentous day." [1]



**The law is named after Dáithí Mac Gabhann, a six-year-old who is awaiting a heart transplant. Photo credit: BBC News.**

Their remarkable story serves as a true inspiration, as it highlights the beautiful and noble driving forces that underpin organ donation - love, perseverance, and purpose. It is indeed heartening to learn that the rate of organ donation is on the rise; however, there remains a significant demand for organs. Let us, therefore, take decisive action and engage in meaningful discussions regarding organ donation with all those we encounter. In the spirit of Dáithí's Law, let us all unequivocally say 'yes' to organ donation.

As the first of June draws near each year, it is with deep humility that we need to recognize the lasting influence of Dáithí and the optimistic transformation he continues to spark not solely in Northern Ireland but throughout the world.

As we join hands in this noble cause, let us pause for a moment and ponder: Could a similar law be possible in a larger country like ours? It is a thought-provoking question that prompts us to consider our societal beliefs and medical practices. We have seen how one brave little kid and his unrelenting family were able to impact policy in Northern Ireland. Surely, this demonstrates that, no matter how difficult the challenge, change is achievable when we work together. So, let us dream large, and perhaps one day we will be able to support a revolutionary law like Dáithí's, thereby amplifying our joint efforts to save more lives through organ donation.

On a final note, we count ourselves extremely blessed to have been given the chance to impart a tale of victory, affection, and aspiration with you today, and we remain dedicated to promoting similar uplifting narratives in the future.

**Dr. Chandra Shekar Annamalai,**

On behalf of ISOT Newsletter team.

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## Mid-Term ISOT, May 2023, Ahmedabad

The mid-term conference of the Indian Society of Organ Transplantation (MID-TERM ISOT 2023) was held from April 14th to 16th, 2023, at the IKDRC, Ahmedabad, and Hotel the Leela, Gandhinagar. The opening ceremony was held on April 15, 2023, in the auspicious presence of Dr Vineet Mishra, Director, IKDRC, Ahmedabad; Dr Krishna Kumar, NOTTO; Dr Aparna Shah; Dr Georgi Abraham; President, ISOT; Dr Vivek Kute; Honorary Secretary, ISOT; Dr Manish Balwani; Dr Jigar Shrimali; Organising Secretary, Dr Chirag Doshi; and other dignitaries.



Dr. Vineet Mishra, Director of IKDRC, discussed various ways to replicate the Gujarat transplant and dialysis models in other states. His determination to achieve the goal of 100% deceased donation by 2025 at IKDRC was hailed by dignitaries. Dr. Krishna Kumar from NOTTO stressed the need to fill the gap between deceased and live organ donations all over India. For the first time, a hands-on transplant immunology workshop was organized on April 14 at the new IKDRC building, and there was an overwhelming response by the residents and delegates. The conference covered many new topics of interest, like donor-derived cell-free DNA, artificial intelligence in transplantation, financial neutrality in organ donation, drones for organ transportation, and digital pathology in transplantation. A joint

session of NOTTO and ISOT was held on April 15, which was well appreciated, and a guest lecture was given by Dr. Aparna Shah, Regional Advisor (South East Asia), WHO, on various WHO initiatives in the area of organ transplant. A panel discussion was held on challenges and solutions for transplantation in the North East states in the moderation of Dr. Krishna Kumar and Dr. Vivek Kute.

On April 16, another standout session was a panel discussion on various challenges and solutions to increase access to solid organ transplantation in government hospitals. Overall, the scientific program was a great success, with participation from transplant experts from kidney, liver, heart, lung, pancreas, immunopathology, multi-organ transplants, and health authorities like NOTTO and WHO. The experts also discussed the "One Nation, One Organ Policy" and addressed its necessity and difficulties.



The take-home message from Mid-Term ISOT 2023 was to increase awareness, access, and promotion of organ donation to meet the increasing demand for organ transplantation. The Mid-Term ISOT 2023 was a unique platform that discussed major issues such as improving access to organ transplantation, gender disparity, deceased donation, the future of transplantation, and inter-organizational collaboration for favourable results in transplantation.

## Upcoming Conferences

### 3rd International Conference on Kidney Failure and Renal Care

July 17-18, 2023

London, UK

### 58<sup>th</sup> ANZSN Annual Scientific Meeting

September 2-6, 2023

Otautahi, Christchurch, NZ

### 8th World Kidney Congress

September 4-5, 2023

Paris, France

### 33<sup>rd</sup> Annual Conference of ISOT

October 5-8, 2023

Kolkata, WB, India





The poster for the 33rd Annual Conference of The Indian Society of Organ Transplantation (ISOT) 2023, held in Kolkata from October 5-8, 2023. It features the ISOT logo, a central graphic of a globe with a cityscape and a stethoscope, and portraits of the conference organizers. The text 'World Health Day April 7, 2023' is written in a circular path around the globe.

33rd Annual Conference of  
The Indian Society  
of Organ Transplantation

**October 5 - 8  
2023, Kolkata**

World Health Day April 7, 2023

**Dr. Georgi Abraham**  
President, ISOT

**Dr. Vivek Kute**  
Honorary Secretary  
ISOT

**Dr. Arpita Roychoudhary**  
Organising Chairperson  
ISOT 2023

**Dr. Pratik Das**  
Organising Secretary  
ISOT 2023

*Welcome you all*

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## Submission Guidelines

Members of ISOT are invited to submit articles, personal perspectives, and stories related to the field, which may include intriguing cases, appealing images, jokes, and cartoons, as well as news regarding regional and state meetings. The maximum length for submissions is between 800 and 1,000 words. Please include a statement stating that your entry does not violate any copyrights. Kindly submit to [isotnewsletter@gmail.com](mailto:isotnewsletter@gmail.com)

All newsletters will be made available on ISOT website ([www.isot.co.in](http://www.isot.co.in))

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